
THE CANADIAN ROSE SOCIETY
ROSE ANNUAL
2008

Digitized by the Internet Archive
in 2014

https://archive.org/details/canadianrose2008cana

THE CANADIAN ROSE ANNUAL 2008

Kenneth McFarquhar

EDITOR

Published by
The Canadian Rose Society
504-334 Queen Mary Road, Kingston, ON K7M 7E7
www.canadianrosesociety.org
email info@canadianrosesociety.org
ISSN 0826-743X

EDITOR'S MESSAGE

This edition of the' CRS Annual is shorter than previous editions. This results from a last minute decision by the CRS Board to reduce the size of the Annual. In addition they decided to move to the new format, which is in your hands. But a decision was also reached to reintroduce The Rosarian on a periodic basis over the course of the year. As well, a Publications chairman has been named and so there is an intention to establish a publications committee. As a result there might be editorial changes of one or both of these publications. But I am sure that the goal will be to produce the best possible quality publications that the CRS is able to produce.

In last year's issue I stated that I intended to establish an editorial committee for the Annual to assist in deciding on subjects and authors for the Annual. The fact that this has not been done was an act of commission and not of omission. Since I thought that there was some possibility of changes in the publications structure I thought it wise to wait until those changes had been defined before establishing this committee. As indicated above there have been some changes in an attempt to rationalize the publications structure, but I am not sure the process is complete. When it is stabilized then we will decide how to proceed on the editorial board.

The Clearing House continues to suffer a serious drop in contributors. Since the 2005 Annual the number of contributors have been 20, 14, 9 and now 5. Any guesses for the 2009 Annual? This is unfortunate because this has been, and could continue to be, one of the more valuable parts of the Annual because it enables current members to exchange information with each other, and also to show new and potential new members the glory of growing roses, which, if used appropriately, might help increase membership. As a matter of fact, instead of allowing this survey to die, we should be exploring the use of this concept to demonstrate other aspects of rose growing. Another thing to consider is that the leaders of our hobby are the board members, rose consultants and judges. Why aren't they more fully represented in the contributors? Should it even be a requirement for these positions to contribute? I would encourage everyone who grows any of the listed new roses to submit a report for the 2009 Annual. There is a report form accompanying this Annual which you can use to submit your report to Richard Chambers.

As I stated in the 2007 Annual I would like to continue to consider the issue of blackspot since it is the worst problem plaguing most rosarians, and everyone seems to have a different solution. For this issue I have sur-

veyed the Public Rose Gardens in Canada to attempt to determine what means they use to control this disease. I would like to thank the four gardens that responded. Their methods are covered in the article in this issue.

Keith Laver has been one of the primary Canadian rosarians over the second half of the 20th century. And so I am very happy that Ethel Freeman agreed to write a biography of him for this issue. I am sure that you, like me, will be impressed by his extraordinary achievements .

Since this is a national publication I normally hesitate to put in very much material that is of local interest. I feel that is best left to the newsletters of the individual rose societies. However I have included the details of the Hamilton and Burlington Rose Society's Rose Show which was held in June this year. This is because it is, at least to my knowledge, the first rose show in Canada devoted exclusively to Canadian roses. This established a very worthwhile precedent which other Canadian rose societies might wish to emulate.

Again I would like to thank my wife Lois for her outstanding dedication in physically putting together this issue of the Annual. When it comes to manipulating things on the computer, like producing a publication, I am totally at sea. And if anything her problem was even more difficult this year than last. First of all a decision was made to have Marie Farnady do the printing, and so this meant dealing with a printer in Kingston, 200 km away, instead of up the street. In addition the decision to limit the size of the Annual came late in the game which meant a difficult decision of what articles to include and what to exclude. But throughout she went about the process in an uncomplaining and efficient manner. Without her assistance I could not have produced this publication.

I hope you find many things of value in this publication. If you have any suggestions for changes, ideas for future articles, etc. I would love to hear about them.

Ken McFarquhar

CONTENTS

EDITORS MESSAGE – *Ken McFarquha*	2
PATRONS, OFFICERS AND DIRECTORS	6
PRESIDENTS OF THE CANADIAN ROSE SOCIETY	9
CRS DEMONSTRATION GARDENS	10
CRS SUSTAINING MEMBERS	12
CRS ACCREDITED JUDGES	13
ROSE CONSULTANTS	14
PRESIDENT'S MESSAGE – *Shari-Lyn Safir*	17
LOCAL ROSE SOCIETIES IN CANADA	18
MINUTES OF THE 2007 ANNUAL MEETING	20
FINANCIAL STATEMENTS	23
BLACKSPOT CONTROL IN CANADIAN PUBLIC GARDENS	26
THE FIRST ALL-CANADIAN ROSE SHOW	33

BUILDING A SOIL COMMUNITY FOR ROSES - *Don Julien* 36

KEITH LAVER –CANADIAN HYBRIDIZER EXTRAORDINAIRE - *Ethel Freeman* 42

A DATA BASE OF HARDY ROSES IN CANADA - *Arnold Pittao* 49

PLANT HARDINESS ZONES - *Ken McFarquhar* 50

WHITHER CRES? - *Ken McFarquhar* 55

ODDS AND SODS OF INFORMATION - *Ken McFarquhar* 58

HELP FOR HYBRIDIZERS? - *Joyce Fleming* 66

THE CANADIAN ROSE SOCIETY AUDIO VIUAL LIBRARY—*Arnold Pittao* 68

THE ROSES OF KAZANIAK, BULGARIA - *Doreen Stanton* 73

RECENT LITERATURE ON ROSE RESEARCH -*David H. S. Richardson* 75

THE CLEARING HOUSE - *Richard Chambers* 81

THE CANADIAN ROSE SOCIETY

CHIEF PATRON
Her Excellency the Right Honourable Michaëlle Jean
C.C., C.M.M., C.O.M., C. D.
Governor General of Canada

PRÉSIDENTE d'HONNEUR
Son Excellence la très honorable Michaëlle Jean
C.C. C.M.M., C.O.M., C. D.
Gouverneure générale du Canada

PATRONS
Mrs. Mary Baillie
Mr. Keith Laver
Mr. Sam McGredy IV
Dr. Felicitas J. Svejda

HONOURARY PRESIDENT
Mrs. Mary Baillie

HONOURARY VICE-PRESIDENTS
Mr. William Dunn
Mrs. Claire Finch
Mrs. Ethel Freeman
Mrs. Anne Graber
Mr. Paul Graber
Mr. Ross B. Linton
Mr. Philip G. Webster

HONOURARY DIRECTORS
Mr. James Anderson Mrs. Betty Biddulph
Mrs. Janeth Cooper Mrs. Viola Heaslip
Dr. Leslie Laking Mrs. June Laver
Mr. C. Denis Yeomans

OFFICERS

PAST PRESIDENT
Ralph Bullough

PRESIDENT
Shari-Lyn Safir

VICE-PRESIDENT
Patrick White

TREASURER & SECRETARY
Marie Farnady
334 Queen Mary Rd., Apt 504,
Kingston, Ont.
K7M 7E7

BOARD OF DIRECTORS

Stephen Bower	Ontario
Ralph Bullough	Ontario
Deborah Francis	Alberta
Claire Laberge	Quebec
Christine Moore	Ontario
George Pagowski	Ontario
Shari-Lyn Safir	Ontario

AUDITOR
J.L. Fisher, FCA
Wilkinson & Company LLP, Chartered Accountants,
785 Midpark Dr., Suite 201
Kingston, ON K7M 7G3

REGIONAL DIRECTORS

British Columbia

Jean Hay, 466 Knight Terrace,
Qualicum Beach, B.C. V8X 3B8 250-752-2172

Patrick White, 4291 Gordon Head Rd.,
Victoria, B.C. V8N 3Y4 250-592-6640

Janet A. Wood, 7084 Blenheim Street,
Vancouver, B.C. V6N 1R9 604-263-8700

Saskatchewan

Arnold Pittao, 5405—29th Street,
Lloydminster, SK T9V 1N2 780-875-7123

Ontario

Gloria Broks, 42 Kamloops Drive,
Toronto, Ont. M2J 3R7 416-493-0141

Ralph Bullough, R.R. #14,
Thunder Bay, Ont. P7B 5E5 807-787-2331

Janice Schmidt, 27 Murray Street,
Barrie, Ont. L4N 2X1 705-728-7719

Quebec

Claire Laberge, 4311 de Bordeaux
Montreal, Québec H2H 1Z4 514-524-1652

New Brunswick

Robert Osborne, Corn Hill Nursery,
2700 Route 890, Corn Hill, N.B.
E4Z 1M2 506-756-3635

PRESIDENTS
of
THE CANADIAN ROSE SOCIETY
and its predecessor
THE ROSE SOCIETY OF ONTARIO

1913-15	Mrs. Allen Baines	1968	Mr. O.E. Bowles
1916-18	Mrs. G. Graeme Adam	1969-70	Lieut.Col. F.E. Goulding
1919-20	Mrs. Aubrey D. Heward	1971-72	Mr. J.W. Whytock
1921	Mr. A.H. Rolph	1973-74	Judge M.A. Cadsby
1922-25	Miss Helen L. Beardmore	1975-76	Mr. Keith Laver
1926-27	Mr. F. Barry Hayes Sr.	1977	Mrs. W. Lysaniwsky
1928-29	Mr. P.H. Mitchell	1978-79	Mrs. J.H. Budd
1930-31	Lieut.-Col. Hugh A. Rose	1980-81	Mr. Ross B. Linton
1932-33	Mr. A.J. Webster	1981-82	Mrs. Audrey Meiklejohn
1934-35	Mr. P.L. Whytock	1983	Mr. Timothy Bucknell
1936-37	Mr. A.J. Webster	1984-85	Mrs. Ethel Freeman
1938-39	Mr. P.L. Whytock	1986-87	Mr. Jim Anderson
1940	Mr. D.C. Patton	1988-89	Mr. Cecil Lamrock
1941-42	Mr. A.A. Norton	1990-91	Mr. Paul Graber
1943-45	Activities Suspended	1992-93	Mrs. Doreen Stanton
1946-47	Lieut.Col. Hugh A. Rose	1994	Mr. Gilbert Whittamore
1948-49	Mr. A.J. Webster	1994	Mrs. Doreen Stanton
1950-51	Mr. F.F. Dutton	1995	Mr. Paul Graber
1952-53	Miss Mabel Stoakley	1996-97	Mrs. Barbara Clarke
1954-55	Mrs. P.H. Marshall	1998-99	Mrs. Wendy Downing
1956-57	Mr. F.F. Dutton	2000-01	Mrs. Elizabeth Schleicher
1958-59	Mr. W.J. Keenan	2002-03	George Pagowski
1960-61	Mrs. J.H. Baillie	2004-05	Mrs. Rachel Flood
1962-63	Mr. Eric Billington	2006-07	Mr. Ralph Bullough
1964-65	Lieut.Col. F.E. Goulding	2008	Ms. Shari-Lyn Safir
1966-67	Judge M.A. Cadsby		

CANADIAN ROSE SOCIETY
DEMONSTRATION ROSE GARDENS

(Chairman: Doreen Stanton,
172 Maplehurst Ave., Willowdale, Ont. M2N 3B9)

Demo Gardeners love to show off their gardens but would appreciate a call before visiting. Not nice to be caught with the weeds showing.
If you have a rose garden you'd like to be considered as a Demonstration Rose Garden, write to the Chairman or email her at doreen.stanton@sympatico.ca.

British Columbia			
Janet A. Wood	7084 Blenheim St., Vancouver, B.C. V6N 1R9	604-263-8700	Climbers and Most Others
Patrick White	4291 Gordon Head Rd., Victoria, B.C. V8N 3Y4	250-592-6640	Most Classes
Ontario			
Jim Anderson	8 Melville Cres.,Brampton, ON L6W 2S4	905-459-6518	Most Classes
Donna & Frank Barkey	4405 Townline Rd. N. R.R.2 Blackstock, ON. L0B 1B0	905-655-3561	Explorers and Morden Roses and other Hardy Roses
Edna Caldwell	R.R. 1 Shanty Bay, ON L0L 2L0	705-721-0484	Hybrid Teas Hardy & Old Roses
Claire & Ian Finch	21 Ashall Blvd. Toronto, ON. M4B 3C2	416-755-9735	Hybrid Teas Most Classes

Kenneth & Rachel Flood	155 Edgehill Dr., Kitchener, ON. N2P 2C6	519-653-9505	Most Classes
Manuel & Manuela Goulart	1412 Northmount Ave. Mississauga, ON L5E 1Y6	905-274-9488	Most Classes
Ray & Eleanor Hopkins	14 Lawrence Ave. Stoney Creek, ON L8G 2M7	905-664-4592	Hybrid Teas OGR's
Walter Lemire	RR1 Oldcastle, ON N0R 1L0	519-737-6788	Hybrid Teas
Larry Lougheed	19 Sundance Cres Scarborough, ON M1G 2M1	416-439-7494	Hybrid Teas Hybridizes Roses
Lucille McDonald	240 John St., Gananoque, ON K7G 1A7	613-382-2333	email clmcdoald@ sympatico.ca
Doreen Stanton	172 Maplehurst Ave. Willowdale, ON M2N 3B9	416-229-0656	Hybrid Teas Miniatures

C.R.S SUSTAINING MEMBERS—2007

The Canadian Rose Society would like to thank the following Members and others for their generous support this past year.

George E. Andrews
Debbie J. Berg
Catalpa Enterprises Inc
. (Mr. & Mrs. K. Flood)
Barbara Clark
Michael Falla
Peter Fawcet
Lesley Finlay
Gladys M. Fitzpatrick
Joyce L. Fleming
Thomas W. Fox
Ethel Freeman
E.M. (Ted) Hawes
Bruce Homer
Leonora Hopkins
B. Vincent Kelly
Dr. Henry A. Kuska
Dr. Leslie Laking
Keith Laver
Florence Lazar
Norman J. Levesque
Kenneth Long
Paul Maletta
William McCarthy
Ken McFarquhar
Barbara L. Munton
Martha Oldham
Photis Philos
Dr. Fern A. Rahmel
Ellen Spencer
Doreen Stanton
Avery Wagg
Philip G. Webster
Roger Wheatcroft
Judy Zinni

An essential source of income for the Canadian Rose Society is the membership fees, which are paid by you, the members. But like most organizations this income is not sufficient to enable the Society to do everything that it would like to do, and should do, to promote the rose in Canada. Many members give an additional amount to help the Society cover this difference, and by so doing they become sustaining members.

If you would like to give a donation to the CRS of any amount you can either include it with your annual membership renewal or contact the Treasurer, Marie Farnady, whose address is given with the list of officers. An income tax receipt will be issued for your additional contribution of $10.00 or more. The Canadian Rose Society thanks you most sincerely for your donation.

CANADIAN ROSE SOCIETY
ACCREDITED JUDGES

Chairman: Rachel Flood, R.R. #3, 155 Edgehill Dr., Kitchener, Ontario N2P 2C6

ALBERTA
Ianthe Goodfellow

BRITISH COLUMBIA
Audrey Brisbane
Garry Brust
Joan Dobell
Jean Hay
Viola Heaslip
Terrence Martinich
Beverley Matheson
Patrick White
Anne Williams

ONTARIO
Jim Anderson
Mary Audia
Shirley Binns
Gloria Broks
Edna Caldwell
Reta Caldwell
Richard Chambers
Barbara Clarke
Denis. Creighton
Claire Finch
Rachel Flood
Krys Good
Paul Graber
Anne Graber
Ivy Gross
Fay Jensen
Kathleen England
Vincent Kelly
Sue Ann Krac
June Laver
Walter Lemire
Larry Lougheed
Norman MacKay
Marilynn Mitchener
Dave Money
Dorothy Morrison
Jean Morrow
George Pagowski
Marie Pearson

Roberta Roberts
Elizabeth Schleicher
Helmut Schleicher
Janice Schmidt
Judy Shedden
Ruth Somerville
Peg Spence
Ellen Spencer
Doreen Stanton
Avery Wagg
Phil Webster

QUEBEC
Mary Baillie
Tatiana Kochanski
Claire Laberge

CRS CERTIFIED ROSE JUDGES BY PROVINCE

ALBERTA
Jenny Hart
Matthew Mitchell
Robyn Richardson
Linda Trim

ROSE CONSULTANTS

The Canadian Rose Society has developed a program of Rose Consultants who are available to be called upon by both Affiliated Rose Societies and Garden or Horticultural Societies as well as members of the general public. Their purpose is to provide help and information on the growing of roses particularly in their own parts of the country where they have the most experience. Many are familiar with conditions in other areas or can get the information in short order. All have grown roses for a number of years and have served the Canadian Rose Society in many ways: as Regional Directors or members of the Board, as Demonstration Gardeners, or as Judges. All have shown a desire and willingness to communicate and share their knowledge as speakers or writers and as assistants at Rose Shows or other displays of plants and roses.

Jim Anderson	8 Melville Cres., Brampton, ON L6W 2S4	905-459-6518
Mary Baillie	145 Brandy Rd., Foster, QC J0E 1R0	450-539-2906
Audrey Brisbane	1146 Lucille Drive, Brentwood Bay, BC V8M 1H6	250-652-4071
Ralph Bullough,	R.R. #14, Thunder Bay, ON P7B 5E5	807-787-2331
Edna Caldwell	R.R. #1, 274 Line 3 South Shanty Bay, ON L0L 2L0	705-721-0484
Reta Caldwell	4 Pinehill Court, Innisfil, ON L9S 1R5	705-721-1777
Richard W. Chambers	157 Pinewood Ave., Toronto, ON. M6C 2V6	416-653-9654
Barbara Clarke	476 Martin Grove Road, Etobicoke, ON. M9B 4M4	416-622-6422
Denis Creighton	3 Naylor Street, Maple, ON L6A 1R8	905-832-1101
Joan E. Dobell	10675 Madrona Dr., North Saanich, B.C. V8L 5L8	250-656-8666
Claire Finch	21 Ashall Blvd., Toronto, ON M4B 3C2	416-755-9735

Rachel Flood	155 Edgehill Dr., Kitchener, ON N2P 2C6	519-653-9505
Ethel Freeman	15 Chiltern Hill Road, Toronto, ON M6C 3B4	416-787-4451
Ianthe Christine Goodfellow	Box 123, Pincher Creek, AB T0K 1W0	403-627-3709
Paul & Anne Graber	10 Fairfax Cres., Scarborough, ON M1L 1Z8	416-757-8809
Jean T. Hay	466 Knight Terrace, Qualicum Beach, BC V9K 1G2	250-752-2172
Viola Heaslip	1025 Greenridge Cres., Victoria BC V8X 3B8	250-479-6563
Denise G. Kennedy	P.O. Box 1463, Stouffville, ON L4A 8A3	905-642-2627
Claire Laberge	4311 de Bordeux, Montréal , QC H2H 1Z4	514-524-1652
June Laver	7791 Mill Lane, Caledon , ON L7E 0M8	905-880-4486
Len Lee	461 Gowland Cres., Milton, ON L9T 4G6	905-878-4085
Ross B. Linton	Unit 502, 1 Royal Orchard Blvd., Thornhill, ON L3T 3C1	416-327-5492
Larry Lougheed	19 Sundance Cres., Scarborough, ON M1G 2M1	416-439-7494
Norman A. Mackay	324 Newbold Court Burlington, ON L7R 2Y6	905-637-6401
Lucille MacDonald	240 John St., Gananoque, ON K7G 1A7	613-382-2333
Dr. Donald M. McLean	6-5885 Yew St., Vancouver, BC V6M 3Y5	604-263-9076
Robert Osborne	Corn Hill Nursery, 2700 Route 890, Corn Hill, NB . E4Z 1M2	506-756-3635
George Pagowski	1103-1966 Main St. W., Hamilton, ON L8S 1J6	905-528-2175

Marie Pearson	3272 Valmarie Ave., Mississauga, ON L5C 2A8	905-275-7089
Elizabeth Schleicher	2369 Doncaster Drive, Burlington, ON L7P 3V9	905-335-9399
Doreen Stanton	172 Maplehurst Ave., Willowdale, Ont. M2N 3B9	416-229-0656
Philip G. Webster	4 Cowley Ave., Etobicoke, ON M9B 2E1	416-233-7833
R. Patrick White	4291 Gordon Head Rd Victoria, BC V8N 3Y4	250-592-6640
Janet A. Wood	7084 Blenheim St., Vancouver, BC V6N 1R9	604-263-8700

If you would like further information on this program would you please contact the secretary, Marie Farnady. Her contact information is given on the list of officers.

Presidents Address



Bonjour fellow Rosarians

Do you remember those paint by number sets where you concentrated on staying within the lines? Well now that we are adults we realize that creativity is often found in blurring the lines and thinking out of the box. I'm here to shake things up, which is not to disparage the incredibly hard work of my predecessors. I want to not only get back to the 'good old glory days', but be even better; by improving our publications, creating committees, increasing membership and improving communication across the country.

I'm currently President of the Greater Toronto Rose & Garden Society. a Master Gardener and a member of The Garden Club of Toronto. I am also active in 4 other horticulture societies, so you can see where my passions lie!

Many of you have skills and talents which would be invaluable to the Society. Whether you are in zone 2 or zone 9, we value your input from across the entire country. Help make a difference. Call me to share ideas on how to make the coming years our best.

I hope to meet each one of you at the World Rose Federation Convention in Vancouver, where the 2009 AGM will be held. That's right - not in Toronto! This is a National society and I want to reach out, truly, from coast to coast.

For the love of roses,

Sincerely

Shari-Lyn Safir

LOCAL ROSE SOCIETIES IN CANADA

Vancouver Rose Society – Greater Vancouver area, B..C.
Mailing Address: 880 Kinsac Street
Coquitlam B.C. V3J 4T9
President: Brenda Viney
E-Mail: brendaviney@telus.net
Tel: 604-936-1514
Website: www./vancouverrosesociety.org

Fraser Pacific Rose Society - Coquitlam, B.C.
President: Helmut Berner
Website: www.fprosesociety.org

Victoria Rose Club (formerly Peninsular Rose Club) - Victoria & Sidney, BC
Mailing Address: 4579 Scarborough Rd. Victoria, B.C. V8Z 5N6
President: Pat Calveley
Tel: 250-883-2394
E-Mail: calveleyinvictoria@shaw.ca
Website: nurserysite.com/clubs/peninsular

Calgary Rose Society – Calgary, Alberta
President: Cherie Lowe
Tel: 403-295-6871
E-Mail: cherielowe@shaw.ca
Email for Society: info@calgaryrosesociety.com
Website: www.calgaryrosesociety.com

Saskatchewan Rose Society - Saskatchewan
Website: http://icangarden.com/clubs/sroses/

The Wm. Saunders Rose Society - Southwestern Ontario, Woodstock and Tillsonburg to Sarnia and Chatham
Mailing Address: 95 Forest Ave. St Thomas, ON N5R 2J6
President: Richard Cartwright
E-Mail: dominionday@hotmail.com
E-Mail for society: wm.saundersrose@sympatico.ca
Tel: 519-633-3939
Website: http://www3.sympatico.ca/wm.saundersrose

Golden Triangle Rose and Garden Society – Kitchener/Waterloo, Ontario

Huronia Rose Society – Barrie, Ontario
President: Karen Shamas
Mailing Address: 29 Aspen Drive Barrie, ON L4M 5E8
E-Mail: kshamas@transl8.ca
Tel: 705-726-1376
Website: www.huroniarose.usethis.com
Email for society: huroniarosesociety@usethis.com

Greater Toronto Rose & Garden Society-Toronto, Ontario
President: Shari-Lyn Safir
Mailing Address: 9 Tarlton Rd, Toronto, ON M5P 2M5
Tel: 416-789-4922
Contact: Christine Moore Email: GTRoses@aol.com
Website: http://www.interlog.com/~onthort/dist5/yorkrose/gtrgs.html

Hamilton and Burlington Rose Society
Mailing Address: 1164 Golf Club Rd., R.R. #1 Hannon, ON L0R 1P0
President: Stephen Bower
E-mail: Bower_5@hotmail.com
Tel: 905-662-4090
E-mail for Society h&bsociety@sympatico.ca
Website: http://dir.gardenweb.com/directory/hbrs

Society:Société des Roses du Québec Rose Society - Province de Québec, Quebec province
President: Diane Vigneault
E-mail: : diane004@sympatico.ca
Tel: 514-772-3034
Website: http://www.westcliffemarketing.com/rosequebec

Amateurs de roses de Québec – Ville de Québec ; Quebec City
President: Dr. J. Andre Fortin
E-mail: j.andre.fortin@videotron.ca

PEI Rose Society
President: Barbara Stewart
Tel: 902-367-9850
Contact: Rozanna Gorveatt-Flynn
RR2, Fairview, PE C0A 1H0 Tel: 902-675-3491
e-mail: rozi@pei.sympatico.ca

M I N U T E S of the ANNUAL GENERAL MEETING (AGM) CANADIAN ROSE SOCIETY (CRS)

Date: Sunday, May 4, 2008, 1:00 to 3:00 p.m.
Place: Toronto Botanical Gardens, Toronto, Ontario
Opening Welcome & Call To Order:
According to the bylaws, having a quorum, Ralph Bullough called the meeting to order and extended a welcome and thank you to the members and the guest speaker for attending.
In Memoriam:
A minute silence was observed in memory of our membership who died during the past year.
In Accordance with the amended By-Law of the corporation, Paragraph 47 - *At all meetings of members of the Corporation every question shall be determined by a majority of votes cast unless otherwise specifically provided by the Companies Act or by the by-laws.*
In absentia ballots received by the secretary within the prescribed time are considered valid voting instruments; votes cast electronically and received by the secretary within the prescribed time are considered valid voting instruments
A total of 237 ballots were mailed to the members on April 14, 2008; 39 completed ballots were received – 25 members constitute a quorum motions carried on basis of electronic voting.
Minutes of the Previous Meeting: - March 18, 2007 as printed and circulated in the AGM mailing to each member.

Votes Required	Yes Votes Received	No Votes Received
25	36	3

Motion Carried.
There was no business arising from the minutes.
President's Report
Dear Canadian Rose Society Member,

I am taking this opportunity to update you on the progress made this year in the Canadian Rose Society (CRS). Our challenge was to take the necessary steps to revitalize our organization to be a truly National body. Until now most of the activities have been centered in Ontario, the primary supporter of the CRS, both financially and with other resources. These great supporters have tried hard over the years to implement a national focus, but with limited success. About three years ago the Board of Directors realized that the initial CRS structure, developed 50 years ago, was not conducive to operating nationally. Annual General Meetings (AGM) were required to be held in Toronto. The cost and effort to hold functions nationally was prohibitive. The CRS fee structure created a perception that the CRS was competing with the local societies for members. These factors resulted in poor communications between rosarians across the country.

The primary change implemented in 2007 was the revision of the

CRS By-Laws, enabling CRS AGM's to be held anywhere in Canada. This was a long process ending with final government approval. In addition, we identified two projects (Growing Roses as a Hobby and the Earth Kind project) to be undertaken through the national collaborative efforts of all local rose societies across the country. Teleconference meetings with the local society Presidents across the country were instituted.

I want to share with you our vision of how the society will grow and provide years of benefit to a Canada-wide, expanding membership community. I envision that AGM's will be held across the country in conjunction with local society regular meetings. Electronic voting affords each member the same voting power as if they were present at the meeting. This is augmented by sending details for each motion to be voted on in the agenda to our members prior to the meeting. All future CRS efforts and projects will be underpinned by a national focus. We will work with the local societies to determine what the CRS should and will do and prepare budgets accordingly. The Board of Directors will consist of members from rose societies across the country.

The benefits we are aiming to achieve include:

Provide information, education, and valuable resources on growing and exhibiting roses through collaborative relationships with other Canadian and worldwide societies

Develop on-line resource lists that help local rose societies stay current with new rose-related publications

Develop on-line educational presentations that local rose societies can use at their meetings

Provide national communiqués, which will enable the sharing of news and ideas with the members of all provincial rose societies.

Establish broader membership drives across the country.

Expand fundraising efforts

Improve camaraderie between societies

Encourage cross-Canada communication through organizing and sponsoring speaking tours of national and international rosarians. The sharing of costs and central organization will allow many more groups the opportunity to learn from many different perspectives.

Thank you,

Ralph Bullough,

President

Treasurer's Report: as printed and circulated in the AGM mailing to all members.

Votes Required	Yes Votes Received	No Votes Received
25	36	3

Motion Carried

Appointment of Auditor:
Motion Wilkinson & Company LLP, Chartered Accounts of 785 Midpark Dr., Suite 201, Kingston, ON K7M 7G3 (J.L. Fisher, FCA) be appointed as Auditor for Year End December 31, 2008.

Votes Required	Yes Votes Received	No Votes Received
25	37	2

Motion Carried.
Membership Report: as printed and circulated in the AGM mailing to all members.

Votes Required	Yes Votes Received	No Votes Received
25	36	3

Motion Carried
Presentation of Nominations for the Board of Directors: as presented and circulated in the AGM mailing and voting ballot to all members: **Votes Required 25**

Name	Yes Votes Received	No Votes Received
Ralph Bullough	37	2
Claire Laberge	37	2
George Pagowski	39	
Deborah Francis	36	3
Patrick White	37	2
Stephen Bower	36	3

Motion carried.
The above members were declared elected for a two-year term to the 2008 Board of Directors.
Adjournment at 3:00 p.m. – There being no further business the meeting then adjourned.

Secretary Marie Farnady Ralph Bullough, President

GUEST SPEAKER
Our guest speaker was Ralph Bullough. The subject of his presentation was **"Growing Roses in Northern Ontario".**

AUDITORS' REPORT

To the Members of
The Canadian Rose Society

We have audited the statement of financial position of The Canadian Rose Society as at December 31, 2007 and the statements of reserve - restricted for education, revenue, expenditures and operating surplus and cash flows for the year then ended. These financial statements are the responsibility of the society's management. Our responsibility is to express an opinion on these financial statements based on our audit.

Except as explained in the following paragraph, we conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In common with many not-for-profit organizations, the society derives revenue from donations and memberships, the completeness of which is not susceptible of conclusive audit verification. Accordingly, our verification of these revenues was limited to the amounts recorded in the records of the society and we were not able to determine whether any adjustments might be necessary to these revenues, excess of revenue over expenditures, current assets and fund balances.

In our opinion, except for the effect of adjustments, if any, which we might have determined to be necessary had we been able to satisfy ourselves concerning the completeness of the revenue referred to in the preceding paragraph, these financial statements present fairly, in all material respects, the financial position of the society as at December 31, 2007 and the results of its operations and cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Wilkinson & Company, LLP
Chartered Accountants
Licensed Public Accountants

KINGSTON, Canada
January 30, 2008

WILKINSON & COMPANY LLP
Chartered Accountants & Tax Specialists Since 1964

785 Midpark Dr., Suite 201, Kingston, Ontario K7M 7G3 (also in Trenton & Belleville)
Telephone (613) 634-5581 or 1-866-692-0055 • Facsimile (613) 634-5585 • Website: www.wilkinson.net

THE CANADIAN ROSE SOCIETY
STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 2007

	2007 $	2006 $
ASSETS		
CURRENT		
Cash	38,039	26,254
GST recoverable	425	639
Prepaid expenses	1,575	1,654
	40,039	28,547
LIABILITIES		
CURRENT		
Accounts payable and accrued liabilities	7,244	1,305
Deferred revenue	2,700	3,477
	9,944	4,782
NET ASSETS		
RESERVE - RESTRICTED FOR EDUCATION	14,150	14,150
OPERATING SURPLUS	15,945	9,615
	30,095	23,765
	40,039	28,547

APPROVED ON BEHALF OF THE BOARD

Director

Director

THE CANADIAN ROSE SOCIETY
STATEMENT OF REVENUE, EXPENDITURES AND ACCUMULATED OPERATING SURPLUS
FOR THE YEAR ENDED DECEMBER 31, 2007

	2007 Budget Note 4 $	2007 Actual $	2006 Actual $
REVENUE			
Donations	2,310	11,285	8,675
Interest income		4	121
Memberships	10,720	9,365	10,567
Other (net)	1,275	1,267	3,283
	14,305	21,921	22,646
EXPENDITURES			
Professional fees	1,236	1,542	4,352
Honorarium			500
Insurance	2,000	2,700	2,706
Office and general	1,430	733	1,163
Publishing	11,275	9,889	14,905
Telecommunications	1,800	727	1,598
	17,741	15,591	25,224
EXCESS OF REVENUE OVER EXPENDITURES (EXPENDITURES OVER REVENUE) FOR YEAR	(3,436)	6,330	(2,578)
ACCUMULATED OPERATING SURPLUS - BEGINNING OF YEAR	9,615	9,615	12,193
ACCUMULATED OPERATING SURPLUS - END OF YEAR	6,179	15,945	9,615

The accompanying notes form an integral part of these financial statements

WILKINSON & COMPANY LLP [redacted]

Editor's Note
Reference in this statement is made to Note 4. If you wish to see the note it can be obtained from the treasurer whose name and address is given in the list of officers

BLACKSPOT CONTROL IN CANADIAN PUBLIC ROSE GARDENS

As we all know blackspot is one of the major problems we encounter in our attempt to grow good roses. And there does not seem to be a good consensus on what we must do to control it. The hybridizers are working hard to try to develop roses which are, if not immune, at least highly resistant. We used to be able to control it with spraying but that is rapidly becoming not only legally impossible but socially difficult *as* well. We can avoid growing roses that are susceptible to it, but that eliminates a lot of roses that many of us would like to grow, and in particular many of the roses that have a prominent place in our rose shows.

In thinking about this situation I started to wonder how the experts deal with this problem, specifically the people who care for our public rose gardens. If anyone would know what is the best way to deal with this problem it is highly likely to be them. And so I wrote to many of those gardens to ask them what they did to minimize the damage from blackspot.

I got responses from four gardens, and I would like to thank them most heartily for their contributions to this survey. Their responses are given below. In addition we had an article written by Claire Laberge in the 2007 Annual describing the method used by the Montreal Botanical Garden. I will briefly summarize her conclusion below and also add one detail which should have been included in that article.

1. University of British Columbia Rose Garden

The garden is located atop the "Rose Garden Parkade", which is off North West Marine Drive. The garden is between the "Chan Centre for the Performing Arts", Vancouver's premier concert venue, and the "Koerner University Centre" (which among other things houses the "Sage Bistro" - a quite good restaurant). About 100m to the north west is the Museum of Anthropology, highly regarded both for its fine collection and its architecture.

The Rose Garden is somewhat in excess of 2000 sq.m of roses, hardscapes, hedges, and lawns. There are app. 350 roses, representing about 40 different varieties. The aesthetic is rigidly formal, with the roses growing in raised planters, and surrounded by Buxus microphylla hedges.

The garden is often (oh god, often) rented out to movie companies for location shoots (I'm told the garden is "Cloud 9" on "Battle Star Galactia"). It is often used for weddings and graduations. As you are probably aware , Vancouver will be hosting the 2009 "World Rose Convention" (www.worldrosevancouver2009.com/). I've been informed that we're on the tour itinerary.

Black Spot is a big problem, which given Vancouver's mild, humid climate, and the garden's confined structure is no great surprise. Different varieties manifest different susceptibility, but I'd roughly estimate that at least 70% of the collection are impacted, probably 40% being severely affected. Most notably the "Chicago Peace", "Climbing Peace", and "Icicle", are badly hit. Last summer we had to defoliate all of such plants at least twice.

Some nine years ago there was a decision to eschew "non organic" methods of disease control in the garden. Black Spot control was composed of a lime sulphur/dormant oil prophylaxis in the winter, and a weekly spraying of baking soda/citrus oil or baking soda/ summer horticultural oil in the summer. For the last two years Daconil 2787 (Chlorthalonil) was sprayed at bud break.

I became the ad hoc "point man" (which means I get the pointy end if something goes wrong) for the garden about a year ago. There has been a decision to return to more traditional methods this coming year, "for the health of the plants". In addition to the lime sulphur/dormant oil and Daconil winter regime, we shall be treating the roses with a bimonthly alternating treatment of "Easout" (Thiophanate-methly) and "Funginex" (Triforine) this summer. Should we notice no great improvement we may return to the previous "eco-friendly" approach, if there is a palpable improvement we shall continue with the "traditional" regime.

Additionally we have begun a program of replacing sub-optimal roses with newer more vigorous (and hopefully more Black Spot resistant) specimens. The plant stock replacement is being accompanied by replacement of the soils in the beds (lots of organic manures are being included) as well as a more assiduous fertilization regime. The idea is that healthier plants will be more resistant to all pathogens, including Black Spot. Last year we replaced 3 beds, and the idea is to replace minimally two beds per season until all the plant stock is renewed. The roses are being spaced somewhat further apart when being replaced.

Stephen Borden

2. Van Dusen Botanical Garden.

1. We grow varieties that are proven to be hardy and disease-resistant in our climate. As you know, in our wet West Coast climate growing blackspot-free roses is a challenge, if not impossible. After many years of trial and error, our overall approach to growing roses begins with choosing only roses that are proven to be hardy and pland disease-resistant in our climate (with the exception of our new Heritage Rose Collection - a collection of historical roses). Specific varieties are recommended to us by local rose expert and nurseryman

Brad Jalbert, who supplied us with all of the roses currently in our formal Rose Garden.

2. We replace roses that don't perform well. We have had some challenges with the soil in our Rose Garden over the years and this combined with microclimatic effects means that sometimes even the recommended disease-resistant varieties don't do well there. When a specific rose variety does poorly, we remove it and replace it with another disease-resistant variety.

3. By keeping our roses healthy and well-watered, we reduce the occurrence of black spot and other diseases. The roses are watered regularly so they are never stressed. In the past they were watered with oscillating sprinklers but we have just installed a new irrigation system. While we were unable to install drip irrigation, which is ideal, the new sprinkler heads are just above ground level and only the lower leaves and parts get wet. James waters the roses only on hotter days and during the day when the water can quickly evaporate from the leaves, never in the late afternoon or evening. He also waters deeply and less frequently to encourage a healthy, vigorous root system.

4. Maintenance: While we don't have the staff time to tend to the roses on a daily basis, James periodically removes any leaves that bear blackspot and cleans up any dropped leaves at the base of the plants.

5. Fertilizers and Mulch: In the spring the beds are mulched with well-decomposed compost that is rich in leaf matter. Alfalfa and blood-meal are applied in May, and a slow-release fertilizer (23-3-23) is applied twice per year. In years past, the beds were heavily mulched with well-rotted steer manure each year but we now use steer manure only every few years.

6. We do not use any chemical pesticides or fungicides. This year is the best our formal Rose Garden has looked in over a decade, with few incidences of black spot so far. Much of the success can be attributed to our commitment to growing disease-resistant varieties and the improved irrigation has probably played a large role as well. Despite this though, even one of our new varieties is showing signs of it, more than the others, so we'll likely replace that variety next year.

New Practices:

We will be experimenting with new practices in 2009. VanDusen Botanical Garden's new focus on sustainability is leading us to experiment with compost tea and with neem oil as pre-emergent anti-fungal treatments. As with

other Canadian jurisdictions, we must be cautious in how the use of these alternative pesticidal products is communicated here in B.C. Until those products are registered for use, we are constrained to say that compost tea is a "foliar fertilizer" and that neem oil provides "leaf shine" despite the many studies that have been done proving their efficacy in anti-fungal treatment of roses. Home gardeners should feel very confident in using these natural products. Their lack of formal registration as pesticides is merely due to the fact that natural products cannot be patented - thus no profit incentive for registration. We recommend growing healthy roses using " green" techniques. Products such as compost tea and neem oil will allow us to reintroduce less disease-resistant cultivars and species for public display in our botanical garden.

James Pickett

3. Niagara Parks Botanical Gardens and Butterfly Conservatory.

I think that everyone will agree that creating a healthy soil through the use of organic practices will lead to healthier plants that do not rely completely on pesticides or synthesized fertilizers. Molasses, Carbon and Evergro are the products we have trialed thus far. The liquid carbon as well as being high in organic matter has four strains of bacillus added to it that 1. provide defense against pathogens. 2. release enzymes that degrade organic matter and fertilizers that in turn are made available for root uptake. 3. stimulate plant growth and root development by bonding to plant roots and in turn aid in absorbing nutrients. 4. Control diseases by suppressing plant pathogens. The molasses serves as a natural source to feed the organisms in the soil. The evergro plant food provides phosphorus and other micronutrients. It also provides gibberellins, auxins and mycorrhizal fungi.

There are many other interesting products that we will be trialing that are said to be beneficial with disease suppression including liquid fish, which is applied as a foliar.

I believe that our soil structure has improved (after 3 applications) because of these products and our roses have improved from previous years, however we did not do separate trial beds and we still were spraying preventatively for blackspot, powdery mildew and insect pressure. I will be trying to trial some beds individually with different products this year but I am still uncertain of what the results will be due to the close proximity of all the rose beds. It would be unreasonable to trial one rose garden vs. the other because of the unfavorable conditions existing at the old yard rose garden.

Dave Voogt.

4. Annapolis Royal Historic Garden

We have around 2000 rose bushes in the gardens. We are still able at this point to use chemical fungicides to control black spot in our collection. Even so, first and foremost, we depend on cultural practices and sanitation to help us control the disease. We clean up the rose beds and rake all the old rose leaves in the spring. When pruning we remember that air circulation is important, so we thin the centre of the plant, and are careful with the spacing. We disinfect our secateurs as we prune so as not to spread disease organisms from plant to plant. As we go through the rose beds during the growing season, we remove diseased leaves so as to lessen the spread of spores. The plants are fed three times through the growing season with a 6-12-12 fertilizer and we topdress with rotted manure or peat moss each year. We water when necessary and realize that an unstressed plant can withstand disease better than a stressed one. Because we try to showcase some of the historically important roses, we can't always rely on growing resistant varieties, but we have replaced some lesser known more disease susceptible cultivars. We spray every seven to ten days after the plants leaf out alternating Funginex (triforine) with Senator (thiophanate-methyl). We have tried in the past to control the disease with baking soda sprays, but had little luck with it.



Looking forward to hearing how other public gardens are dealing with this problem.

Karen Achenbach.

5. Montreal Botanic Garden.

In the 2007 Annual there was an article by Claire Laberge in which she described their efforts over a period of years to find an organic solution to the problem of blackspot. After some experimentation with various materials, including sodium bicarbonate or baking soda, they finally discovered that the best material to use was potassium bicarbonate. What we failed to mention in that article was how you can buy potassium bicarbonate. Claire's answer to that

Roses in Annapolis Royal Historic Garden

'Tabris'



'Blue Moon'



Blue Moon—one of Jesse's favourites...

query is as follows.

The potassium bicarbonate is homologated in Canada under the name MILSTOP. If you use Milstop you cannot mix it with soap. You will get phytotoxicity. At Montreal Botanic Garden we used 0-0-47 (potassium bicarbonate). It is a fertilizer sold for the greenhouse culture and the hydroponic culture to alcanize the water. The recipe is 5g1.

Paul Graber, Elizabeth Schleicher, Ethel Freeman, Paul G. Osen, Philip Webster At the First All-Canadian Rose show



The First All-Canadian Rose Show



On June 21 and 22, 2008, The Hamilton and Burlington Rose Society held The First All-Canadian Rose Show. 28 Exhibitors entered 272 roses representing 30 hybridisers and 125 of their cultivars. This show received more publicity and financial reward than any of our other typical rose shows of the past. I hope that this is inspiration for others to hold All-Canadian or All-American Rose Shows in the same format.

Thank you to all who supported us.

Mark Disero, All-Canadian Rose Show Chairman

Best in Show
Bob Horlings, for the best Dr.Felicitas Svejda rose, 'Henry Kelsey'

The Table Of Honour
Philip Webster, for the best Dr. Neville Arnold rose, 'Rosy Vision'
Stephen Bower, for the best Stephen Bower rose, 'Eee'
Bob Horlings, for the best George Bugnet rose, 'Therese Bugnet'
Elaine Sparrow, for the best Lynn Collicut rose, 'Prairie Joy'
Ethel Freeman, for the best Campbell Davidson/Lynn Collicut rose, 'Morden Snowbeauty'
Joyce Fleming, for the best Joyce Fleming rose, 'Marilyn O'Connor'
Lindsay Wilcox, for the best H.F. Harp rose, 'Metis'

Elizabeth Schleicher, for the best Brad Jalbert rose, 'Water Lily'
Anne & Paul Graber for the best Keith Laver rose, 'Maverick'
Elizabeth Lee, for the best Elizabeth Lee rose, 'Morden Sunrise x Home Run'
Lorne Sparrow, for the best Larry Lougheed rose, 'Muskoka Moonlight'
Anne & Paul Graber, for the best George Mander rose, 'Glowing Amber'
Bob Horlings, for the best Henry Marshall/Lynn Collicut rose, 'Morden Centennial'
Edward Ozog, for the best Dr. Casimir Mekdeci rose, 'Apricot Beauty'
Julius Muha, for the best Julius Muha rose, 'Lilli Marlane x Moon Drops'
Anne & Paul Graber, for the best Ian Ogilvie/Felicitas Svejda rose, 'De Montarville'
Joyce Turner, for the best George Pagowski rose, 'Katy Mae'
Anne & Paul Graber, for the best Ruth Pallek rose, 'King Lear'
Nancy Wilcox, for the best Isabella Preston rose, 'Patricia Macoun'
Elizabeth Schleicher, for the best Bruce Rennie rose, 'April Lynn'
Harry McGee, for the best Dr. Frank L. Skinner rose. 'Betty Bland'
Philip Webster, for the best Philip Webster rose, 'seedling'

Honourable Mention
Lindsay Wilcox, for the best Henry Eddie rose, 'Eddie's Crimson'
Edward Ozog, for the best Robert Erskine rose, 'Gleam'
Lindsay Wilcox, for the best William Saunders rose, 'Agnes'
Jane Wood, for the best Keith Spencer rose, 'Spencer's Delight'
Anne & Paul Graber for the best Seager Wheeler rose, 'Seager Wheeler'
Edward Ozog, for the best Percy Wright rose, 'Helen Bland'
Edward Ozog, for the best Stanley Zubrowski rose, 'Louis Riel'

Special Mention for best unnamed seedling
Joyce Fleming, for her seedling 'Goldmarie x L83'

Best In Show Bob Horlings "Henry Kelsey"





BUILDING A SOIL COMMUNITY FOR ROSES

By Don Julien

Editor's Comments

This article is reprinted from the 2004 Annual of the American Rose Society. I would like to express my appreciation to the American Rose Society and Don Julien for their permission to use this article

Contemporary rose growers familiar with the basics of organic fertilizers recognize that successful nutrition for their roses relies on a vibrant soil community that breaks down organic materials into nutrient forms that plants can absorb. If you "feed the soil," you feed the plant. What is not so clearly understood is how greatly the soil composition can vary in composition and that different plant communities have specific preferred balances in the soil community. This article explores how the soil community can vary and what balance roses might prefer.

Bacterial vs. Fungal Soils

Soil-life falls into several categories: fungi, bacteria, protozoa, nematodes, insects, earthworms. Mammals and more. These feed on organic matter and dead tissues; other living creatures feed on them.

The food webs that build upon bacteria and fungi are very different. Bacteria are very small and their predators are likewise small. There may be many steps in the chain before we reach the predatory insect stage. Fungi are mach larger and tend to be eaten by larger predators, or directly by insects; the steps to predatory insect are much shorter. A soil with an active bacterial community will tend to have a much smaller predatory insect population than a soil with an active fungal community.

Bacteria produce a slime by which they attach themselves to surfaces. The slime layer is usually made of alkaline materials, so soils with high bacteria concentrations will tend to be alkaline. Protozoa and bacteriavorous nematodes feed on the bacteria and produce ammonia. The alkaline conditions encourage nitrifying bacteria that convert the ammonium to nitrates. So, bacteria-dominated soils tend to have nitrogen available in nitrate form.

Fungi however, produce organic acids as waste, tending to acidify the soil, generally in a pH range of 5.5 to 6.5. Fungivorous nematodes, amoebae and fungivorous micro-arthropods feed on fungi, producing ammonium. Nitrifying bacteria are excluded by a low pH, so most of the available nitrogen remains in ammonium form. Ammonium nitrogen is more rapidly assimilated in the plant, while nitrates have to be converted back to ammonium before they can

be easily assimilated.

Bacteria have a carbon to nitrogen ratio of 4:1 to 5:1 (5 parts carbon to 1 part nitrogen). Fungi have a higher ratio, closer to 10:1. When bacteria and fungi feed, one carbon molecule will be assimilated, while two will be lost to CO_2. So to maintain a population, the C:N ratio of the organic matter in the soil has to be three times the C:N ratio of the organisms. To maintain purely bacterial population the organic matter would have to have a C:N ratio of 12:1 to 15:1; to maintain a fungal population the organic matter C:N would have to be 30:1. Some representative C:N ratios: Grass (20:1), hay (40:1), chopped leaves (40:1), wood chips (500-700:1). At a C:N ratio above 30:1 (as mulch of wood chips for example), the availability of nitrogen becomes quite limited, and plant growth requiring a steady supply of nitrogen will suffer.

Plant Succession

What conditions contribute to a leaning toward bacterial or fungal dominance? A discussion of forest succession will clarify this. Succession is a natural process of ecosystem change that takes place over time. It is observed more readily in abandoned fields or burned areas, processes that interrupt the current stage of succession (or man's interception in the process).

The classic model starts with bare ground. The first stage involves invasion of mosses, lichen, annual weeds and some grasses. These are herbaceous, shallow-rooted, and short-lived. Depending on the soil acidity, dampness and available nutrients, it may include horseweed, crabgrass or pigweed. The second stage introduces larger herbaceous weeds, such as Queen Anne's lace, asters and sedges, as well as a wider range of grass species. The third stage sees an extension of grasses, crowding out of many of the weeds and wildflowers, plus the appearance of shrubs and vines, such as blackberry and sumas. Scatters tree seedlings begin to appear.

Depending on the climate (and the part of the country), the next stages vary somewhat. In the Northwest, alders are usually the first to appear, along with other fast-growing softwoods, such as vine maples, cottonwoods and cascara. These shade out the herbaceous plants, reducing competition for the conifer seedlings, which begin to appear. As the conifers mature, the shorter-lived (and shorter) deciduous trees find less light available for their developing seedlings, and the mature deciduous trees die.

In the East, pines first appear, followed by an understory of young hardwoods that eventually crowd out the pines. In many parts of the west, pines are the beginning and the end of the forest stages.

In the early stages of succession the organic matter is near non-existent until the grasses begin to set down root systems and thatch. At this point, the organic matter has a very low C:N ratio and the soil community has a high bacterial dominance. In this "weed" stage, the bacterial mass outnumbers the fungal mass by 10 to 1.

As grasses develop and dominate, the ratio changes, with fungal mass growing until, in the late stages of grasses, the ratio is even between fungi and bacteria. This would be comparable to a healthy lawn pasture.

As shrubs begin to appear, they bring with them a deciduous organic matter having a higher C:N ratio. Many of these shrubs – blackberries for example – form thickets that lay down a carpet of detritus and shade, suppressing the grasses that had previously dominated. In other words, they rapidly create a soil environment favorable to their own kind. Sumas and similar shrubs do not grow as thickets, but do tend to grow in "colonies."

At this point with a higher C:N ratio and decreasing pH, we begin to see not only an increase in fungal populations, but also an increase in vesicular-arbuscular mycorrhizal (VAM) fungi, which help retrieve nutrients from malnourished soils. At this stage, the fungal biomass overbalances the bacterial biomass by a ratio of two to five times.

As deciduous or coniferous trees begin to appear, their leaf and needle drop begins a significant drop in the pH of the soil. Grasses find it harder to compete, and eventually, shrubs also find it harder to survive. And the dominance of VAM fungi shifts to ectomycorrhizal fungi. At this point, the fungal community is dominant. In the deciduous stage the fungal biomass may be up to 100 times the bacterial biomass, and, in the old-growth stage, the ratio can grow to 1,000 times the bacterial biomass.

Where do Roses Fit?

The benefits of matching the soil community to the plant include modifying the pH to the appropriate range and converting nutrients in appropriate forms and amounts. But as additional important benefit is encouraging a soil community that controls the pests common to the plant. In the case of roses, as with many shrubs, the pests include various foliar and soil fungi and insects that spend at least part of their life cycle on or in the soil. The soil in a shrub community includes a large number of soil-life that feeds on fungi or other insects. This natural control can reduce the need for pesticides.

To evaluate the soil community needs for roses, we need to look at species roses and their cousins. (This is particularly useful in that many of our root-

stocks are species roses: *'Rosa multiflora', 'R. canina'. 'Manetti'.)* Species roses are deciduous, thicket-forming shrubs. They are very good at crowding out other competitors and spreading by runners, even to the point being considered noxious weeds. They are often found in nature colonizing open areas, generally in draws or courses where water may be more prevalent. In eastern Washington, *'R.. Woodsii'* (Pearhip Rose) can be found colonizing gullies and railroad easements where soil is too barren for grasses and weeds but supports scrub shrubs.



'R. woodsii'

Blackberries, a relative of roses, prefer a pH range of 6.0 to 6.5. They vigorously colonize edges of pastures and grasslands, and, once established, readily send runners into the competing pasture, claiming additional ground. They rapidly crowd out competing species and create litter that modifies their soil. Salmonberries, another relative, are superb at colonizing edges between pastures and woodland.

Roses also prefer a pH range of 6.0 to 6.5 and are greatly enhanced by VAM fungi, rather than ectomycorrhizal fungi.

With this in mind, it would appear that roses would be most comfortable with a soil community similar to the transition stage between grassland and shrubland, when the fungal biomass is about twice the bacterial biomass. This

would place the C:N ratio of the biomass at about 8:1 or 9:1, and a desirable organic matter C:N at 24:1 to 27:1.

So What Do I Do About It?

The first consideration should be the choices you make for organic soil amendments and mulches. My compost pile is composed of mostly grass from the lawn, with additions of vegetable wastes. The C:N ratio is very low (and decomposed mostly by bacteria and red worms) and is most appropriately used in the vegetable garden for row crops. When I built my first rosebeds, I used a lot of wood shavings from a local stable. With an extremely high C:N ratio, plus I used peat moss as additional organic matter when I planted new rose bushes. The resulting organic matter mix was extremely loaded toward carbon. The roses performed much better when I mulched with a commercial compost that included a mix of yard wastes, with a C:N ratio much closer to 30:1. Similarly, a friend mulches with shallow layers of grass clippings, which would modify soil heavy in woody organic material. If you are starting fresh, an appropriate mulch would be a composed combination of grass clippings, leaves and woody parts, with a balance tipped toward the leaves rather than the grass.



A second consideration is enriching the soil community with an infusion of biota. Commercial compost tea, steeped from biologically rich composts and teeming with bacteria and fungi, is the hot new gardening product. These are offered by nurseries, brewed on site and to be used within 24 hours. A

number of commercial brewing devices are available to nurseries for the purpose, and a few models are available to the home gardener. While compost tea is marketed for foliar application and touted as a foliar boost and disease suppressant, the real value in compost tea is in improving the soil community. It can really make a difference in plant and garden performance, wit a few caveats.

The issue with compost tea is the wide variation in the teas' microbial composition, based somewhat on the nature of the compost used, but more importantly on the screening that is used in the process. A fine screen allows bacteria to be washed from the compost into the tea but blocks fungi; this produces a tea that is valuable for application on annuals, perennials and vegetables. A looser screen allows a greater number of the fungal masses to move into the tea; this produces a tea mote appropriate for shrubs. Soil Foodweb's website can be viewed at: (www.soilfoodweb.com) has a good discussion of many brands of compost tea equipment and the nature of each brand's screening. If you are considering using a compost tea, the vendor should have a fact sheet that includes a typical microbial composition. Look for a tea that has a fungal biomass greater than the bacterial biomas,

A little attention to the mulch and amendments applied to your rose garden may big dividends in creating a healthy and supportive soil community that keeps your roses healthy and happy.

Some representative Carbon to Nitrogen (C:N) ratios

Blood Meal	4:1
Alfalfa hay	3:1
Garden Soil	12-15:1
Compost	15-20:1
Seaweed	19:1
Grass	20:1
Cow Manure	20:1
Horse Manure	25:1
Fresh Weeds	25:1
Fresh Vegetable	26:1
Fresh leaves	40:1
Peat Moss	50:1
Dry leaves	60:1
Pine needles	90-110:1
Bark	100:1
Sawdust	400:1
Wood chips	500-700:1

These materials can be mixed in various amounts to reach a preferred C:N ratio C:N ratio. For example, two parts grass and one part dry leaves would yield

Keith G. Laver - Canadian Hybridizer Extraordinaire

By Ethel Freeman

Keith G. Laver, one of Canada's most celebrated rose hybridizers, was born in Cooksville, Ontario (now Mississauga) in 1917, and grew up on the family fruit farm. It was there that he had his first introduction to roses, which his mother, a teacher, grew at home.

In 1936 he enrolled at the Ontario Agricultural College, Guelph (now the University of Guelph) where he majored in horticulture and biology. More importantly, he met June Rutherford, who was taking the Homemaker's Course for Girls at Macdonald College. They both graduated in 1940, and the dynamic duo of Keith and June Laver officially began when they married in March 1942.



Fresh out of school, Keith's wide-ranging career began in the early 1940s, when he worked for the Canadian government during World War II. After the war he was employed with the Ontario Department of Agriculture for a time.

In 1950 he and June started a small nursery in Cooksville that they called Pinehaven Nurseries. Beginning small but growing rapidly, it was a general nursery that grew everything. Roses were just part of the crop. Along with such things as azaleas and rhododendrons, they were soon growing 60,000 roses a year on a separate farm in Meadowvale, Ontario. These were sold mostly through their garden centre, the first "garden centre" in Ontario. But they also sold roses by mail order to the United States and the rest of Canada.

Keith became the Canadian agent for Kordes, Poulsen and McGredy and grew their new varieties and some seedlings. Each spring these famous European hybridizers sent budwood, which Keith budded onto *Rosa multiflora* under stock, it being the under stock that produces the best roses for Canada. Keith then grew and tested these varieties on the Meadowvale farm. And that's how he first met and later became great friends with the noted American Miniature rose hybridizers, Frank Benardella and Harm Saville. They would come to Pinehaven Nurseries looking for new varieties. It was during this period that Keith himself became interested in Miniature roses and eventually had a greenhouse full of Miniatures.

Aided by Nina Marshall of the Canadian Rose Society, June and Keith held a competitive rose show at their garden centre each September. Customers were encouraged to enter their roses and judging was done by Canadian Rose Society judges. The whole idea was to have fun and showcase roses. It also led to Keith and June being closely involved with the CRS. Both Keith and June were on the Board of Directors for many years and Keith served as president in 1975-1976.

Keith's support of the Canadian Rose Society has been unwavering. Generous donations of roses for Mini rose shows, for CRS exhibits at the Canadian National Exhibition, for rose sales and for a myriad of other events were always forthcoming. In addition over the years June and Keith hosted many, many memorable Canadian Rose Society events at their beautiful home in Caledon.

Keith's activities have covered a wide range of fields related to horticulture and the environment. In 1968 he was the Chairman of an Ontario Ministry of Health task force to bring in new pesticide legislation. The government and the Ministry of Health wanted to transfer the Pesticide Act to a new Ministry of the Environment. This task force assisted in the transfer and formulated a new Pesticide Act, and Keith authored a book on the subject. For a list of Keith's many other positions and awards see Appendix 1.

When Keith was at school in Guelph he had worked at hybridizing gladioli and lilies. In the early 1970s he started to play around at hybridizing roses, and by 1978 his new interest was in creating Miniature roses. He and June had sold Pinehaven Nurseries in 1974 and had bought a five-acre property in Mississauga. In a small greenhouse there he did his hybridizing and propagated and sold Minis. Then, in 1985, the Lavers moved to the country and started Springwood Roses in Caledon.

Most hybridizers use what they consider to be the best of the current, up-to-date parents in their work, and that was how Keith began. He used some of Dot's varieties, some of Ralph Moore's varieties and any other Miniatures that looked good at the time. Among them were 'Popcorn' (Dr. Morey, 1973), 'Dwarf King' (Kordes, 1978), 'Lemon Delight' (Moore, 1978), 'Party Girl' (Saville, 1979) and 'Lavender Jade' (Benardella, 1987). From these he developed his own breeding stock, and most of the roses he eventually introduced came from this stock.

All of Keith's hybridizing as with most serious hybridizers was done in the greenhouse and not outdoors. It is felt that this is the only way the process can be controlled year-round. In fact, many hybridizers make crosses only in winter. But Keith did his hybridizing all year.

His seeds were kept in cold storage in little flats and would start to germinate in them. The seeds would produce about 25,000 seedlings a year and about five percent were selected for further evaluation. During this next assessment, again only five percent were retained. Because the first bloom is not a good test, after looking at the second blooms, the numbers would be whittled down to four or five possibilities. Plants were discarded if they had poor blooms or poor foliage, and single flowers were automatically thrown out. This latter criterion proved to be a bad plan, and Keith now wishes that he had at least looked at some of those singles. But he relied on his own judgement and the advice of others such as Sam McGredy, Harm Saville and Frank Benardella as to what was considered worthwhile at the time.

Once the four or five promising seedlings were selected, each was propagated to give a dozen plants. Some of each variety was then planted out in the field and some in four-inch pots and grown in the greenhouse. And yet again, each of the varieties was critically assessed before a decision was made as to whether it should be introduced.

Keith had three state-of-the-art greenhouses in Caledon, covering 10,000 square feet. Here, in addition to hybridizing, he also propagated his introductions for sale. At its peak the greenhouses contained 30,000 to 40,000 Miniature roses.

In selecting parents for his hybridizing Keith believed that the female parent would have the more dominant characteristics. He always looked for a pollen or male parent that was disease free, hardier than most and had good flower form. One rose that he felt was an excellent pollen parent was Ralph Moore's 'Rise 'n Shine'. Another was his own 'June Laver', which has since been used by many other hybridizers in their crosses.

In the beginning most of Keith's Miniature introductions had a decided Hybrid Tea form. He also did some hybridizing of larger Hybrid Teas. In fact, six of them have been introduced in South Africa. But gradually his roses tended more to the mass-flowered varieties that could be sold as pot plants. These came to be known as the Potluck series and the Festival series. Meilland of France introduced the Potluck series in Europe and De Ruiter of Holland used the Festival series. 'PotluckYellow' is Keith's most widely sold rose – well over 5,000,000 pots around the world.

Keith introduced the first of his many roses in 1982, the light pink 'Baby Face' and the medium red the 'Blueblood'. Ovnext over the next twenty or more years he continued to introduce one beautiful rose after another. In fact, Keith has registered an astounding 105 roses. Some of his most famous Miniatures are 'Antique Gold', 'Mountie', 'Gold Mine' (the official rose of the 1985 World Federation of Rose Societies conference held in Toronto), 'Riverdance', and, of course, 'June Laver'. For a full list of Keith's introductions, see Appendix 2.

Today Keith and June still live in Caledon. At age 91, Keith is no longer hybridizing and the greenhouses are not running at full tilt. But the Lavers still plant a huge vegetable garden and there are hundreds of plants in the greenhouses. The property looks exquisite, as always, with many Old Garden and shrub roses. But the centerpiece for any visitor is surely the display garden of Keith's Miniature varieties, lovingly tended by June.



Keith Laver can now certainly rest on his laurels as one of Canada's most prolific and important rose hybridizers.

Appendix 1

1940	Worked for the Canadian Government during World War II
	Early 60s President of the Canadian Gladiolus Growers Society
1964	President of the Ontario Nursery Trades Association
1965	President of the Canadian Nursery Trades Association
1968	Chairman of the Ontario Ministry of Health task force to bring in new pesticide legislation
1969-75	Chairman of the Ontario Pesticide Advisory Committee
1972	Recipient of the Trillium Award from the Ontario Nursery Trades Association for outstanding Contributions to horticulture
1975	Recipient of an Ontario Agricultural College Centennial Medal, 100 of which were presented to outstanding horticulturists
1975-76	President of the Canadian Rose Society
1976	Chairman of the Ontario Avian and Mammalian Committee, relating to the humane treatment of animals.
1976-81	Member of the Environmental Assessment Board of Ontario
1982-83	President of the Canadian Ornamental Plant Foundation

Keith is also a Past Director of the Canadian Rhododendron Society and a long-standing member of the Board of Trustees of the University of Guelph. At present he is an honourary member of that Board.

+

Appendix 2

Roses introduced by Keith Laver

Name	Code	Color	Introduced
Alexander Milne	Lavmilne	lp	1987
Antique Gold	Lavtique	yb	1996
Apricot Doll	Lavdoll	ab	1991
Baby Face	Lavaby	lp	1982
Blessed Event	Lavfun	pb	1993
Blue Ice	Lavchip	m	1993
Blueblood	Lavblu	mr	1982
Bonhomme	Lavhomme	w	1986
By Design	Lavsign	ob	1992
Crème Glacée	Lavcrème	ly	1990
Dainty Bouquet	Lavfuhr	mp	1994
Diana Festival	Lavdian	lp	1996
Double Date	Lavflush	op	1994
Enjoy	Lavjoy	pb	1990
Fall Festival	Lavfal	rb	1997
Fiesta Clown	Lavclo	or	1994
Flame Bouquet	Lavfire	or	1999
Flaming Potluck	Lavflame	dy	1995
Gala Gold	Lavchro	dy	1994
Gold Mine	Lavoro	dy	1985
Ice Princess	Lavice	lp	1983
Ivory Festival	Lavyip	w	1997
June Laver	Lavjune	dy	1988
King Edward (HT)	Lavking	dr	2002
Lemon Bouquet	Lavtiki	my	1999
Living Bouquet	Levlinger	ly	1991
Margaret Laver	Lavmar	w	2001
Maverick	Lavsask	rb	1995
Mountie	Lavcale	mr	1985
Ontario Celebration	Lavmount	or	1984
Painted Doll	Lavpaint	ob	1986
Painter's Touch	Lavtuch	ob	1998
Peach Festival	Lavcap	op	1997
Perfect Potluck	Lavpet	dy	1992
Pink Bouquet	Lavquest	lp	1991
Pink Strike	Lavstrike	lp	1998
Platinum Lady	Lavplat	m	1989
Pleasantly Pink	Lavplease	mp	1992

Name	Code	Color	Introduced
Potluck	Lavpot	dr	1983
Potluck Blue	Lavnova	m	1995
Potluck Cream	Lavacre	ly	1987
Potluck Frosty	Lavpure	w	1995
Potluck Gold	Lavgold	my	1991
Potluck Gold new	Lavgold	my	1999
Potluck Orange	Lavjack	or	1990
Potluck Purple	Lavpup	dr	1992
Potluck Red	Lavmin	dr	1989
Potluck White	Lavwyte	w	1987
Potluck Yellow	Lavglo	my	1986
Riverdance	Lavirish	pb	1998
Rosy Forecast	Lavlad	dp	1994
Royal Victoria	Lavictor	op	1991
Sans Souci	Lavsans	dp	1986
Show Carpet	Lavbric	lp	1996
Showbound	Lavbound	op	1990
Silken Laumann	Lavcom	ob	1993
Small Slam	Lavlinc	dr	1987
Snowbound	Lavaway		1990
Springwood Beauty	Lavnew	op	1995
Springwood Classic	Lavclass	or	1999
Springwood Coral	Lavscent	mp	1988
Springwood Gold	Lavtynine	my	1989
Springwood Mauvette	Lavisle	m	1996
Springwood Pink	Lavdusk	dp	1992
Springwood Pink	SatinLavsat	mp	1997
Springwood Purple	Lavpurr	dp	1991
Springwood Red	Lavred	dr	1988
Springwood Red Victor	Lavbert	dr	1995
Springwood Ruby	Lavaru	dr	1993
Springwood White	Lavsnow	w	1992
Striped Festival	Lavming	rb	1999
Striped Pet	Lavdance	pb	1993
Summer Festival	Lavsum	rb	1997
Sun Princess	Lavsun	lp	1984
Sweet Butterfly	Lavstar	m	1989
True Gold	Lavtru	dy	1997
Tut's Treasure	Lavtrek	dy	1991
Wilfred H Perron	Lavshrimp	mp	1988
Yellow Bouquet	Lavkin	dy	1994

June Laver



Potluck Yellow



A Database of Hardy Roses [1] in Canada

By Arnold Pittao

In colder areas of our great Dominion it is no secret that growing roses there adds additional challenges to the job! The long winters with temperatures reaching into the –40's are not hospitable to rose survival. Fortunately there are a considerable number of cultivars suitable for reasonably reliable growth in these areas.

The Saskatchewan Rose Society has undertaken the job of assembling as complete a database as possible for roses suitable for winter survival without significant winter protection for Zones 1 through 4. It has taken several years to collect this information and of course there are always additions and corrections to be made.

The database consists of over 300 entries at present. Each record contains the following information: Cultivar Name, Breeder (or introducer), Year Bred/ Introduced, Parentage, and Comments. In addition a confidential field records known sources for the particular cultivar, released only upon consultation. We are also attempting to secure one or more images of as many extant cultivars as possible.

Of the 300 cultivars, it is regrettable to report that about 35% of these are, as far as can be determined at this point, extinct. The vast majority of these are extinct because they failed to measure up to the hardiness required for prairie growth.

The collection of the data was for two primary purposes: to summarize all of the known rose cultivars hybridized in one document, and to determine if and where specimens exist. It is hoped that some of the better cultivars might be re-introduced into commerce at some point in time.

There are other attempts on a more grand scale that are attempting to record information for ALL Canadian-bred roses for all hardiness zones but they are beyond the scope of this document. One such document appears on the National-Roses-Canada website.

All the cultivars listed on the Database of Hardy Roses in Canada also appear on HelpMeFind Roses on the web. This author has not verified the content of these entries.

The Saskatchewan Rose Society has, at this point, determined its "top priority

list" of cultivars that it feels should be re-introduced into commerce and is doing research to secure propagation sources. A document such as this is always a work in progress and is constantly being amended and supplemented as additional roses are bred and historical information found and/or verified.

[1] For purposes of this project "Hardy Roses" means cultivars that will survive in climatic Zone 4 and lower.

PLANT HARDINESS ZONES

By Ken McFarquhar.

As horticulturists and rose growers, one of the key determinants of what we can grow in our current location is the climate which we experience. A primary reason for this is that it is one of the few factors which we can do little to control. So one of our great needs is to know what plants will grow in what climates.

A major accomplishment in trying to meet this need for knowledge was provided by Larry Sherk, at that time the Chief Horticulturist at Sheridan Nurseries, and Eugene Ouellet, an Agrometeorologist. They carried out this work under the auspices of the Plant Research Institute of Canada.

The 1996 edition of the CRS Annual included an article written by Larry Sherk on the method of development of the Canadian Plant Hardiness Zone Map. This article is reproduced as Appendix A below. This map was subsequently given the designation Plant Hardiness Zones of Canada 1967. It is reproduced below.

The article included as Appendix A notes that there is a separate US Hardiness Zone Map. But it should not be used for Canadian zones because there is a difference in the definition of zones between the two maps. There is a rough relationship between the two maps but since in addition they are based on different factors they each tell you different things. While the US maps are based solely on minimum winter temperatures, the Canadian map is based on the following seven factors: low winter temperatures, length of frost-free period, total summer rains, mean maximum temperature of the warmest month, maximum snow depth, January rainfall, and maximum wind gusts.

As we all know the climate is changing for various reasons. And so Natural Resources Canada's Canadian Forest Service updated the plant hardiness zones using the same variables as were used in developing the previous map, but

using more recent climate data (1961-1990). They have used modem climate mapping techniques and incorporated the effect of elevation. The new map indicates that there have been changes in the hardiness zones that are generally consistent with what is known about climate change. These changes are most pronounced in western Canada. This map is shown below as Plant Hardiness Zones of Canada 2000.

Note that Natural Resources Canada, Canadian Forest Service, is now "Going Beyond the Zones" and trying to develop potential range maps for individual species of trees, shrubs, and perennial flowers by collecting species specific information. Check out more about this project at http://planthardiness.gc.ca/index.pl?&lang=en if you would like to be involved.

APPENDIX A.

It isn't hard to understand why Rododendrons and even Camelias will grow so well in many parts of British Columbia but not in Manitoba where the winters are much more severe. Unlike many Roses you cannot make adjustments to the plant's growing conditions, so that they will survive in more severe climates. Thus it is relatively easy to assign hardiness ratings to different Rhododendrons, Magnolias, Maples, etc., but other than shrub types not to Roses. Low winter temperatures are not the only factors that affect the winter survival of woody ornamentals. Length of frost free period, total summer rains, mean maximum temperature of the warmest month, maximum snow depth and maximum wind gusts also affect winter survival.

To help answer these questions, and provide a guide for Canadian Gardeners, Eugene Ouellet, an Agrometeorologist and I developed the Canadian Plant Hardiness Map over 30 years ago while employed by the Plant Research Institute, Canada.

COLLECTION OF DATA.

A survey was conducted using a questionnaire sent to 150 establishments, universities, nurseries, etc. across Canada. The questionnaire included a list of 174 species and cultivars of trees and shrubs. For each of these, the following information was requested: (1) Is it hardy and is it's growth satisfactory? (2) Does it need some protection to survive (moderately hardy)? (3) Is it not hardy? Additional comments were also asked for. Returns were received from 108 stations reporting a total of 8,325 items, on the average 77 per station and 48 per taxon. The original data on which this study was based were obtained from many scientists and professionals - all specialists in woody ornamentals.

INDICES OF HARDINESS.

Calculation of the hardiness indices was based on the ratio of the number of

stations reporting a species as hardy to the total number of reporting stations. However, the indices of species were comparable only if the species were reported by the same stations. In this survey, kind and number of species reported varied from station to station. Tender species were reported mostly by the most favourable stations, while the hardy ones were nearly equally reported by all stations. The difficulty was overcome by using as an index of hardiness the average of three ratios instead of one ratio, therefore, the 108 stations were divided into three numerically equal groups of decreasing suitability.
The suitability index for a station was calculated by taking into account the hardiness indices of the species reported by that station. Values for the suitability indices reported by this method varied from 18 for Moose Range, Sask. to 88 for Victoria, B.C.

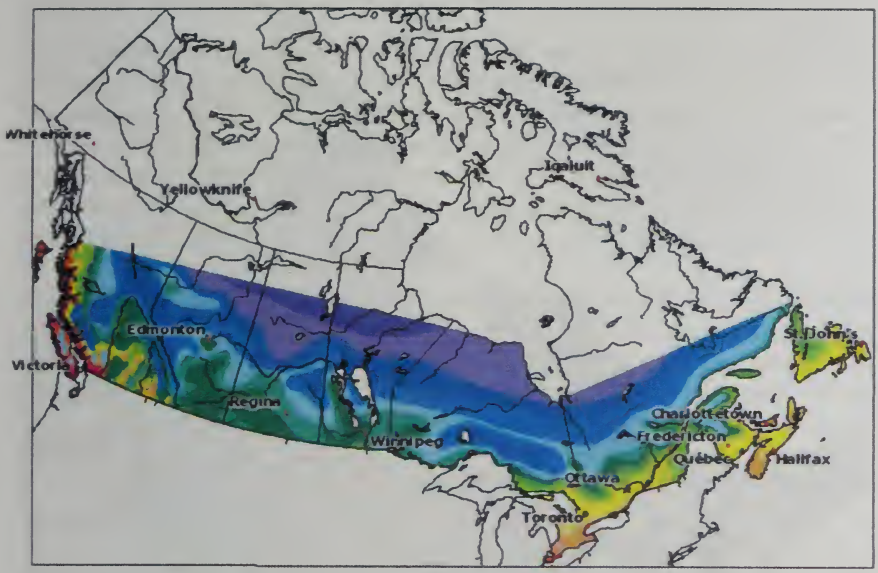
ESTIMATED INDICES OF SUITABILITY

Of the 108 suitability indices thus calculated, only 40 were retained for further use. A method was elaborated to estimate a suitability index for additional stations from climactic data. The 40 suitability indices were related to select climactic normals for the corresponding stations. The seven climactic factors were used, some of which influence the hardening process in plants either indirectly by their influence of growth in summer or directly by their effect in fall, while the others affect plant survival during the winter.
Because of the relationship determined between the 40 original suitability indices and the climactic factors, it was possible to develop a mathematical model and to evaluate numerical coefficients for the climactic factors. Suitability indices for about 650 localities across Canada were estimated by this technique. Some of these indices are: St. John's NFLD., 56; Morden, Man. 36; Saskatoon 27; Victoria 89. In any location protective measures like irrigation, wind shelters, etc., will increase the chance of survival of woody ornamentals.

THE PLANT HARDINESS MAP

The estimated indices were plotted on a map and isolines drawn. Ten zones were delineated and numbered 0 to 9. Each was divided into two subzones of five-unit intervals designated a and b. The map indicates that the most suitable areas border large bodies of water. These areas are coastal British Columbia (zones 9 and 8), followed by the southern Great Lakes area (zones 7 and 6) and coastal areas of the Atlantic provinces (zones 6 and 5). The Montreal region is in zones 5 and 4; the prairies and the northern inhabited areas are in zones. 3. 2. 1 and O.
Today many Canadian nursery catalogues and many Canadian gardening books use the Canadian Plant Hardiness Zone Map and rate woody plants according to it. Americans have a hardiness map but their system differs from the Canadian one and most hardiness ratings are not reliable enough to use in Canada.

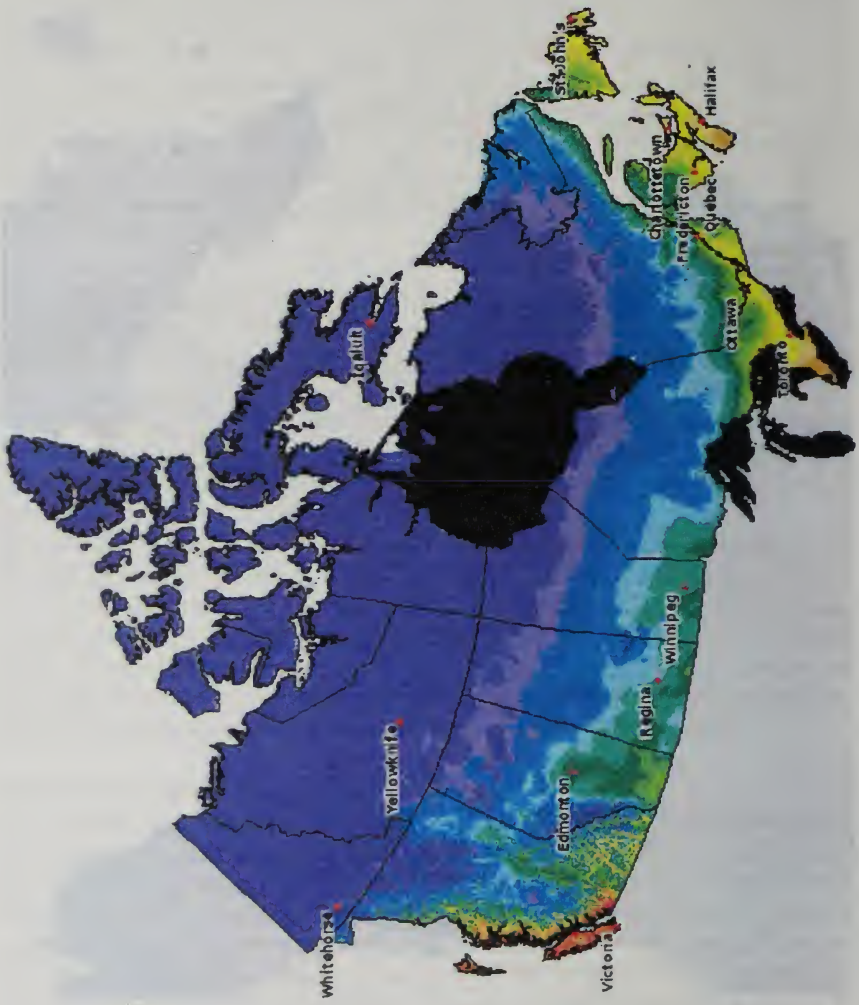
Plant Hardiness Zones of Canada 1967



Plant Hardiness Zones

0a Violet
0b Lavender
1a Blue
1b Light Blue
2a Pale Blue
2b Teal
3a Green
3b Sea Green
4a Lime
4b Light Green
5a Yellow
5b Tan
6a Gold
6b Light Orange
7a Orange
7b Brown
8a Dark Red

Plant Hardiness Zones of Canada 2000



WHITHER CRS?

By Ken McFarquhar

This article is strictly the opinion of the writer and does not purport to represent the opinions of the Board of the CRS or any other officers of that organization. The purpose in it's writing is to attempt to give some input into what I consider a necessary determination of a direction for the future of this organization. The CRS has been in existence for over 50 years and it is my opinion that there is still a need for it today and will be in the immediate future. But to justify it's continued existence it must become clearer what it's role will be in the future.

In addition I should state that I have not been a member of the Board, nor have I participated in any way on any committee of the CRS for some time with the exception of my role as editor of the Annual for the last two years. And so any suggestions I might make could conceivably already be under consideration by the Board, or might be in disagreement with current thought of the Board. In the former case it should give the Board some encouragement that their position is, to at least some degree, being supported. In the latter case it might open up an opportunity of meaningful dialogue.

I believe it is becoming widely accepted that for any organization to be a success it must have both vision and mission statements and a strategic plan. The specifics about these two components are as follows.

(a) Vision and mission statements are deceiving. If you look at the vision and mission statements of an organization they look very simple. This is because they consist of one or two sentences, that, at first sight, would appear to be obvious. So we might wonder, what is the big deal! But in point of fact they result from a long period of discussion about what is the whole purpose of the organization. When that purpose has been articulated, usually in considerable detail, it is then necessary to reduce it to a very concise one or two sentences. What this means is that the only people who can appreciate the true significance of these statements, and be able to implement them in their entirety, are those who have either been involved in it's articulation, or who have been led through the arduous process of their development by the developers. But if done properly they are the foundation of a successful organization.

(b) The purpose of the strategic plan is to list all aspects of what would be an organization's responsibilities under these vision and mission statements, and then to develop a plan of action which will enable the organization to

accomplish them all in the most efficient way. This will obviously involve prioritization and coordination of the various activities

The strength of any organization is in its people. But it must be people who are properly recruited trained and positioned in the organization. Regarding recruiting, too often we approach people with the subtle, and sometimes not so subtle, hint that we can't get anyone else so will she take the position. Then we wonder why people either refuse, which is usually the case, or come into the job with less than total enthusiasm. So we will have to learn to recruit people by emphasizing why the job will be both fun to do and also a chance for personal development.

And then we must train people. This means three things.

We must be certain that they understand what is involved in the job they are undertaking. Too often people go into a job assuming, or being told, that it involves certain things, only to find out that the requirements are far more than they anticipated.

We must give people a chance to move around the organization for several reasons, so that their interest levels will remain high, so that we have flexibility in the organization if someone leaves, and so that we can develop breadth of experience among the volunteers.

Finally we have to understand that being a Board member is a difficult and demanding role because the Board is responsible for running the organization. And even though we probably view running a volunteer organization as totally different and probably easier, than running a business endeavour, in practice they both involve the same set of skills. And running a volunteer organization is, in one sense, more difficult, because while in a business you can get cooperation by offering a good salary, or in a worst case scenario by threatening dismissal, in a volunteer organization you have to gain cooperation by the exercise of appropriate personal skills. Most people, when they first enter an organization, are probably not ready to accept such a demanding role. And many people, because of inclination, time availability or aptitude, will never feel comfortable in this role. So it is necessary to discover who they are and ensure they are properly trained for the role. To discover who they are you must look for various characteristics, some of which might be the kind of mind that can see into the future, has a broad range of vision, and can think strategically rather then strictly tactically. Regarding training, it has been my experience that the best way to train people for this kind of role is by giving ad hoc tasks to perform. This not only enables them to get a deeper appreciation of what the organization is, but enables you to find out whether they have the type of abilities, organizational, analytic, etc., for this type of role.

I believe that it is the responsibility of the CRS to help the individual rose societies to expand and develop their membership. And I believe that this could

be done most effectively through the Rose Consultant program. Currently it is my understanding, although this could be wrong, that this program is not operating effectively. We need a good training program, a good program of continuing education, and standards of performance which should be met by all Rose Consultants. Then it would be the responsibility of the CRS to introduce this program to all of the local rose societies so that they could interest people residing in their areas in rose growing. This should be a major endeavour of the CRS, and might even be the key to its continuing existence.

There are many other activities which will enter into the strategic plan, and so we can see that there will be a lot of activities to coordinate. And this will be the responsibility of the president. And this is where volunteer organizations often flounder. I will illustrate this with a story. When I was president of York Rose and Garden Society, the predecessor of Greater Toronto Rose and Garden Society, we of course held regular board meetings. And at one of those meetings I said something which obviously bothered one of my board members because he told me that the job of a president is that of a gate keeper.

1 didn't say anything at the time but my initial thought was to wonder whether this guy had lost all of his marbles. But then I started to think about it later and I realized that not only was there a lot of truth in it but it might very well be one of the best definitions of a president's role that you can come up with. If a particular job is not being done at all because there is no one to do it, or not done well because the person is either not properly trained, or misplaced, the president will often step into the breach and do it. But this usually means that the problem never gets resolved because the president is so busy doing that job that his true job of recruiting, training, planning, or whatever, never gets done. So a rule that the president is forbidden to do any job except the job he/she is supposed to do might mean that some activity might not get done- at this time but that it will get done next time by an appropriate individual, and as a result in the long term the organization will be stronger for it.

ODDS AND SODS OF INFORMATION

by Ken McFarquhar

The following short articles have been summarized from various publications, as noted.

1. **WHITHER HYBRID TEAS?**

In Sean McCann's column in the July-August 2008 edition of the American Rose. the magazine of the American Rose Society. Sean discusses aspects of hybridizing HTs with three of the prominent modem day hybridizers. This description is excerpted from that article. Appreciation is expressed to the American Rose Society and the author for allowing me to use this article. First came **Gareth Fryer** from England.He feels that it is not as easy to hybridize HTs now as it used to be, but he doesn't know why. He says that they set better than they used to and the germination rate is better but he feels that the final results are more disappointing, i.e. he finds it more difficult to get really good roses.

Fryer 'The Wainwright Rose'



Next up is Thomas Proll, the hybridizer for Kordes of Germany. They have stopped trying to mate two HTs because almost invariably they are subjec to severe infestations of black-spot. So they mate HTs with more disease resistant types of roses. But then you lose shape and size and you also get more clusters than single blooms. So the HTs, Floribundas and Grandifloras are starting to blend together. He speculates on the possibility of a Flori-Tea.



Dickson 'Isn't She Lovely'

And finally **Colin Dickson** from Northern Ireland. He feels that it is more difficult to produce a HT than other types of roses, but when you get a good one there is more excitement with it.

In spite of the difficulties they cause these hybridizers believe that. in the short term anyway, the future of the HT is assured

2. CHROMOSOME NUMBERS DIFFER - SO WHAT?

This is excerpted from an article from the 2007 Annual of the American Rose Society entitled "Deconstructing David". It was written by George R. L. Meiling, who is a prominent rosarian from Columbus, Ohio. Appreciation is expressed to the American Rose Society and the author for allowing me to use this article.

The actual subject of the article is to explore the breeding lines that David Austin used in the development of his many outstanding roses. But that is not why I am summarizing the first part of this article. The author also includes a description of the outstanding contributions made to rose breeding by two Englishmen. And the primary benefit of this summary is to cast some light on the confusing issue of the differing number of chromosomes in various roses.



He first discusses a contribution made by Henry Bennett. He lived in the 19th century and was originally a cattle breeder. Later he got into rose breeding. He noticed a big difference in how people went about cattle breeding as opposed to rose breeding. When breeding cattle people kept careful track of which animals were bred together and so it was possible to track their blood lines. But when breeding roses people simply planted a lot of roses close together and harvested the seeds when they developed by natural means. This means that no one had any idea of what was the background of any rose. He introduced scientific breeding into rose hybridization.



The second Englishman was David Austin. His goal was to recapture the form, vigour, hardiness and scent of the old European roses but to try to incorporate the ever-blooming qualities of the modem roses. The everblooming quality had derived from the Asian roses, but they lacked the natural dormancy and the hardiness of the European roses. So the natural solution seemed to be to breed the European roses with the Asian roses. The difficulty with this was that the everblooming quality was recessive and so did not appear in the first generation. To get an everblooming rose it was necessary to breed the first generation either back with itself or with an everblooming rose. But this was a problem because Asian roses are diploids,

which means that they have 14 chromosomes, while European roses are tetraploids, which means that they have 28 chromosomes. In a cross 1/2 of the chromosomes come from each parent. This means that the first generation cross has 21 chromosomes. But since you can't divide in half without introducing fractions the result was that the first generation cross was infertile. However a few damask roses when crossed with Chinas produced fertile tetraploid offspring, and these became the hybrid perpetuals.

David Austins contribution was to avoid the sterile first generation offspring and breed the European roses directly with the modem hybrid teas and floribundas. Thus be created the roses we know today as English roses.

3. WHY IS THAT ROSE THE COLOUR IT IS?

This excerpted from an article in the 2007 American Rose Annual entitled "The Perception of colour in Roses". It was written by Robert Linck who is a chemistry professor at Smith College. This is excerpted from an article in the 2007 American Rose Society . Appreciation is expressed to the American Rose Society and the author for allowing me to use this article.

There are three aspects which determine how we see the colour of a rose. Two of these aspects exist physically, and they are the light which falls on the rose and the pigment which is in the rose. But just as important is the more abstruse process which happens in our brains and which, at least to the present, no one has been able to completely explain. There are three factors which impact how our brain perceives colour, the colour of the source of the light, the colours that the rose reflects and the presence of two different types of photoreceptors in the eye, called rods and cones.

First consider the colour of the source of the light. Light from the sun is what we call white light but it is composed of all of the colours of the rainbow. If the sunlight hits a red rose other colours are absorbed by the rose but the red light is reflected off of it and so it appears red to us. However if we see our rose inside a building we depend on sources of artificial light to illuminate the rose. Then the colour that we see will depend on the nature of the source of light. For example florescent lights have less red and so a red rose will appear duller when illuminated by it.

But there is another aspect which determines how we see colour. There are two types of photoreceptors in the eye, rods and cones. The cones are less sensitive to light than are the rods. The rods are used by the eye for low light situations, e.g. in moonlight, or for seeing out of the comer of the eye. Since the rods have no colour discrimination everything we see by them is black, white or gray. Cones account for colour vision, and they are located in the centre of the focal

area of the eye. There are three different kinds of cones characterized by three different pigments. They are called L, M and S because they absorb long, middle or short wavelengths.

4. **VERMICOMPOSTING.**

I have seen this discussed in several locations in the last couple of months, but the first time was in a circular from Harrod Horticultural, which I obtained at the Chelsea Flower Show in May of this year. But I was curious as to what is the difference between this kind of composting and what we normally do.

My understanding of normal composting is that Bacteria and fungi act on the organic material added to the compost pile in the presence of nitrogen and cause it to break down into something called humus. When added to the garden it considerably improves the growth of most plants. In the case of roses it is essential that we add organic matter to the beds because roses are heavy feeders of organic matter. We could add the organic matter directly to the beds but it would severely deplete the level of nitrogen in the soil in breaking it down to humus, which can be absorbed by the plant.

The difference in vermicomposting is that the organic matter is broken down by earthworms. I would think that there are likely some earthworms in a regular compost pile but in this case a deliberate effort is made to actually add worms to the pile. Since they are trying to make money they will sell you the worms needed to start your pile. But they do state that you only have to buy them once because they are prolific breeders and their numbers will expand. And when you want to start a new compost pile, since worms like to operate at the top of the pile, you simply skim off the top 20 cm of the pile and use it to start your next pile.

They claim that worms eat and digest up to 1/2 of their body weight in waste every day. And they claim that the result of this digestion is the highest quality organic fertilizer which you can obtain. And of course they are prepared to sell you a container, called a wormery, which they claim is the best way to carry out the process. And since it is covered it can be closer to the back door, and so more convenient. We all know that earth worms are a vital component of our soil, and without them we would be able to grow very little, if anything. And so, at least on the surface, they seem to be making a convincing argument.

5. **A BLUE ROSE?**

Is it possible to create a blue rose? The following description of the difficulties encountered in trying to do so is excerpted from the 2004 American Rose Society Annual. It was written by Dr. Lakshmi Sridharan. She is a molecular biologist and botanist. Appreciation is expressed to the American Rose Society and the author for allowing me to use this article.

The basic problem is that roses lack the pigment delphinidin gene that produces the true blue colour in flowers. In general colour in flowers results from the interaction of pigments known as anthocyanin, flavonols and caotenoids. Anthocyanins are water-soluble red, purple or blue pigments in the cell sap. The rose has only two of the anthocyanin pigments, cyanidin and pelargonidin, but lacks delphinidin.

Can gene cloning create this blue rose? Florigene, an Australian compnay, has been trying to do so. It has isolated two genes necessary for delphinidin production from the petunia, and is developing a program to introduce them into flowers. In 1996 it introduced the blue gene into carnation, but it was more mauve coloured It also failed with roses.

Why did it fail with roses? There are two reasons.

1. To produce a blue flower you need 100% delphinidin production flavonol and acyl groups, but roses lack the acyl group.

2. The fluids in the vacuolar part of the rose cell are acidic, but in the petunia it is alkaline. The alkaline solution maintains the blue colour, but the acidic solution turns it pink.

Based on this article from 4 years ago there appear to be significant problems in creating a blue rose. But there was a recent announcement from Japanese company Suntory that has done some work on this project. They cloned the delphinidin gene from a petunia and inserted it into the Cardinal de Richileu rose. But since cyanidin was still present the rose was more burgundy than blue. Further work was done with RNAi technology to depress the cyanidin and it produced a mauve coloured rose. Suntory is growing batches of these roses and plans to sell them in the USA and Australia in 2009. It sounds to me like they are getting close to producing a blue rose but have still not overcome all of the technical problems of actually achieving a true blue rose.

6. **PETER BEALES NATURAL ROSE.**

In the March-April issue of the American Rose, and on a website, there is a description of a sequence of products which Peter Beales is claiming will eliminate the need for chemicals. At this time I don't have a lot of details but a overview of the products is as follows.

(a) Good Morning Roses is an early season formula that jumpstarts microbial activity in the soil, supports root health, cane production and but production, while making nutrients more available to the plant during this initial part of the year.

(b) Good Afternoon Roses is a mid-season formula that maintains soil health and suppresses disease in the soil. It also provides nutrition for plant health and bloom production during this stressful time of the year.

(c) Good Night Roses is an end of the season formula to help prepare the plant for the rigours of winter. Key nutritional components help the canes adapt to winter stress and minimize dieback.

(d) Good Health Roses consists of natural fungus and disease treatments applied throughtout the growing season.

I have not been able to find out anything about any testing that has been done on these products to measure their effectiveness, what the components are which make up the products, or where they will be sold Frequently these products are not sold in Canada e.g. Mills Magic Rose Mix. But at least we should be aware of their existence so that we can track their progress. Also Peter Beales is a prominent rosarian and so it is probably based on substantial research.

English Roses
'Charlotte'



'Chaucer'



‘L.D. Braithwaite’



‘Jude the Obscure’



all photos George R

Photos George R.L. Meiling

Help for Hybridizers?

by Joyce Fleming

As regarding plant breeder's rights, Valerie Sisson, Commissioner of Plant Breeder's Rights points out that plant varieties are not eligable for plant protection in Canada.

There are legal complications that make obtaining protection for a new cultivar difficult and costly. The actual cost of obtaining a right is $1500, plus an annual fee of $300 for the following 17 years. This levy eliminates any cost to the tax payer, but it is prohibitive for most amateur hybridizers.

In order for a Plant Breeder's Act to be valuable to the average hybridizer, the cultivar has to be vigorously promoted and sold in very large quantities to make the investment in fees worthwhile. This is beyond the hope of most rose breeders and only large global marketers can benefit in this system.

In this writer's experience, Hortico, Inc. has propogated my originations and has without fail paid to me 35 cents per plant sold, as per the rules of the Canadian Ornamental Plant Foundation, which charges $50 per variety registered with them. For one who has hybridized and selected rose seedlings primarily for disease resistance, this is possibly sufficient to cover the cost of the fertilizer; it would not provide future funding towards the work and planning involved in this fascinating undertaking.

A possible solution for the amateur Canadian breeder is to form an agreement with an American propogator with a large American market. In this case, the cost of a plant patent is covered by the American firm. If, in fact, Agriculture Canada had patented the Explorer roses of Dr. Felicitas Svejda, the resultant monies invested would have funded rose research indefinitely.

At that time, it was thought, at least in Canada, that scientific advances should be freely given, but elsewhere in the world hybridizers are protected and thus encouraged. A laissez-faire attitude seems to predominate in Canadian Government circles in any discussion regarding the protection for the plant breeder's accomplishments.

With the new emphasis on genetic engineering, scientists in white lab coats, peering into the electron microscope and selecting the desired attributes for a rose or any other plant, an aspect of plant breeding will be lost. The thrill of old fashioned hybridizing will not be matched by the predictable results of genetic engineering, and there could be unforseen ramifications not yet considered.

So the hope is that the Government will reconsider and provide a means of financial reward for the new hybrids of the future.

Joyce Fleming with 'Roberta Bondar'



The Canadian Rose Society Audio Visual Library

By Arnold Pittao, A/V Librarian

EDITOR'S COMMENTS.
This article describes the contents of the CRS AV Library. This has been considerably expanded over the last few years by the efforts of the current librarian, Arnold Pittao. There are some outstanding programs in this collection and I recommend them for your use. Last winter I was asked to make a presentation on roses to a group from our church. For this purpose I requested the program "The Story of the Rose". I had two choices, to use the dialogue on the presentation or to use the script which Arnold provided and read it myself. I chose the latter to better facilitate the handling of questions. For the people in the audience who grew roses I finished up with a summary of how I look after my roses over the course of the year. It seemed to result in a very successful evening. I recommend these programs to you, either for purposes like this, or for your own personal enjoyment.

The "slide library" of the Canadian Rose Society had existed for several decades and was the result of contributions both from growers/breeders and from the entries submitted to the annual 35mm slide competition held for a number of years.

With the demise of the 35mm slide projector and the advent of the digital image, the useable slides were converted to digital format by myself over a period of time. There are over 1000 digital images now on file.

The current audio visual library is a composite of VHS video tapes and PowerPoint presentations. Some of the video tapes are from the Goulding Memorial Lectures held by the CRS for several years.

Since 2006 I have developed a number of PowerPoint presentations that I have also converted to VHS video format for those who do not have access to the digital equipment. The quality of images that appear on the VHS tapes is less than that of the digital image presentations because of the transfer mechanics. Each CD contains both narrated and non-narrated versions of the show plus a script. 35mm slides or digital images of specific cultivars are also available for loan upon request.

There is no cost for the use of materials to Canadian Rose Society members except for paying the cost of postage both directions.

Order forms and regulations are available either on the CRS website www.canadianrosesociety.org or by email or snail mail from apittao@telusplanet.net or 5405 29 Street, Lloydminster, AB T9V 1N2.

The library is available for your use. Please avail yourself of this membership advantage. New materials will be added as time and resources permit.

Audio Visual Library Programs

Beauty of the Rose
Arnold Pittao, 2007 25 minutes
Available on VHS video tape and
CDRom PowerPoint presentation
A motivational experience illustrating the beauty of the rose. Without narration, but set to classical music, 140 individual roses and rose gardens are portrayed in all their beauty.

Classic Roses in the Landscape
Peter Beales, Canadian Rose Society Goulding Lecture 1997, Vancouver
100 minutes
Available on VHS video tape
Peter Beales began working with roses when he was 15, living in rural Norfolk, England. He worked with LeGrice Roses in Norfolk and with Graham Stuart Thomas at Sunningdale Nurseries in Surrey, before starting his own old garden rose nursery in 1967. He knows more about the larger rose family than anyone else and is an author with an international reputation.

English Roses, The
Arnold Pittao, 2007 36 minutes
Available on VHS video tape and
CDRom PowerPoint presentation
Come on a journey to discover the "English Roses" aka David Austin Roses. The Austin story is briefly told, followed by a look at the development of the English rose - a melding of Old Garden Roses and Modern Roses. A detailed description is given of 20 of the most popular cultivars. Some cultural information provided.

Going For Gold - The World's Favorite Roses
Arnold Pittao, 2007 36 minutes
Available on VHS video tape and
CDRom PowerPoint presentation
A look at all the World's Favorite Roses as determined by the World Federation of Rose Societies. Includes pedigree and pictures of each rose - Peace, Iceberg, New Dawn, Pierre de Ronsard, Elina and 8 others.

Growing Hardy Roses
Dr. Campbell Davidson, Canadian Rose Society Goulding Lecture 2002, Calgary
50 minutes
Available on VHS video tape
Campbell Davidson was the Manager of the Morden Research Station in Manitoba which has introduced more than 150 cultivars to the nursery and fruit industries, including the Parkland Rose series. He was doing research on blackspot of roses in conjunction with a university in Sweden, which he discusses in this video, along with details of the Parkland roses.

Harkness Family & its Roses
Peter Harkness England, Canadian Rose Society Goulding Lecture 1996, Toronto
120 minutes
Available on VHS video tape
Peter Harkness is the grandson of John Harkness who, with his brother Robert, founded the nursery in Bedale, Yorkshire in 1879. Peter was the Managing Director of Harkness Roses while his brother Jack was the hybridizer with such roses as 'Amber Queen,' 'Mountbatten,' ' Savoy Hotel' and 'Margaret Merril' to his credit. This is the story of the Harkness family and their life with roses.

Kordes - The Family And Its Roses
Wilhelm Kordes III, Germany, Canadian Rose Society Goulding Lecture, 1995, Toronto 100 minutes
Available on VHS video tape
Wilhelm Kordes III is the great-grandson of the original Wilhelm Kordes, founder of the nursery near Hamburg, Germany, in 1887. He tells the story of the four generations in the rose business and talks about some of their famous roses: 'Crimson Glory,' 'Esmeralda,' 'Dortmund' and 'Iceberg.'

Passion for Roses, A
Rayford Reddell, USA, Canadian Rose Society Goulding Lecture 2003, Vancouver, 90 minutes
Available on VHS video tape
Rayford Reddell started the Garden Valley Ranch in northern California in 1981. They now grow 7,000 rose bushes to provide 65,000 cut roses to the florist trade and have a retail rose plant nursery on site as well. He is the author of both books and videos on growing roses.

Roses of Bermuda
Arnold Pittao, 2007 36 minutes
Available on VHS video tape and
CDRom PowerPoint presentation
Take a trip to the Island of Bermuda and see the plethora of roses grown there - both known and unknown. The history of Bermuda's "Mystery" roses is presented as is a description of both the "mystery" and known cultivars.

Roses from China and Beyond
Roger Phillips, England, Canadian Rose Society Goulding Lecture 2001, Toronto
60 minutes
Available on VHS video tape
Roger Phillips is the colourful narrator of the six part BBC television series "The Quest for the Rose", author of numerous books on roses and other plants and an award winning photographer. His aim was to learn and understand a scientific discipline and then to explain it to the general reader.

Roses of George Mander
Arnold Pittao 2007 50 minutes
Available on VHS video tape and CDRom PowerPoint presentation
George Mander has been breeding roses since 1969. Most of his selections are minis but he has also bred others. He is best known for his 'Canadian White Star' which appeared on a postage stamp in 2000. This is George's story and that of more than 30 of his roses

Roses of Joyce Fleming
Arnold Pittao 2006 45 minutes
Available on VHS video tape and CDRom PowerPoint presentation
Joyce Fleming who lives in Grimsby, ON has bred a considerable number of roses in several classes over a period of years. She tells her story and that of her roses, including 'Roberta Bondar' and 'Dr. Harry Upshall' in memory of her father.

Roses of Walter Schowalter
Arnold Pittao 2008 22 minutes
Available on VHS video tape and
CDRom PowerPoint presentation
Walter Schowalter lived in east central Alberta all of his 90 years and introduced a number of hardy shrub roses for the severe prairie climate. Several have 'Rose Rambler' in their pedigree. This is a brief story of the man and his roses.

Story of Roses, The
Arnold Pittao, 2006 45 minutes
Available on VHS video tape and
CDRom PowerPoint presentation
This presentation traces the rose from its early beginnings, through its historical development, Old Garden Roses, and to the "modern" classes of roses - hybrid tea, floribunda, polyantha, shrub, etc. Excellent close-up photos of many cultivars.

What's Ahead in the Rose World?
Art Drysdale, Canada, Canadian Rose Society Goulding Lecture 2004,Toronto
75 minutes
Available on VHS video tape
Art Drysdale is one of Canada's best-known horticulturists. For the past four decades he has been writing and doing radio and television broadcasts with practical garden hints, first from Toronto and now from Parksville, BC. Art gazes into where the future of roses may lie.

What's in a Name? English and Shrub Roses
Clair G. Martin, USA, 1999, Toronto
55 minutes
Available on VHS video tape
Clair Martin is the Rose Curator for the Huntington Botanical Gardens in California and author of two recent books on roses, "100 English Roses for American Gardens" and "100 Old Roses for American Gardens". He looks after one of the largest collections of roses in the USA.

Whither the Rose?
Lt. Col. Kenneth Grapes, England Canadian Rose Society Goulding Lecture, Toronto, 1998 90 minutes
Available on VHS video tape
Ken Grapes was the Secretary General of the Royal National Rose Society for 14 years. He examines what he thinks is wrong with the world of roses and what is being done about it in Great Britain.

The roses of Kazanlak, Bulgaria

by Doreen Stanton

On June 5th of this year, I went on a Royal Ontario Museum planned trip of Bulgaria. The intent was mostly to see various interesting ruins and museums of this very old and much invaded piece of Eastern Europe, but for me the most desirable part was the Valley of the Roses as the area around Kazanlak is called by the Bulgarians. The name of the small city is a bit of a mystery itself. It appears in different places as Kazanlak, Kazanlik amd Kazanlŭk which may in part result from translation from the Cyrillic alphabet of Bulgaria.

It is here that Rosa damascena is grown in much the same way we grow corn---fields of it in well-spaced rows. The pink variety is preferred as the scent is considered to be better and stronger. For those of you familiar with old roses you will know that Rosa damascena as a very old variety believed to have originated as its name suggests in Damascus.

'Rosadamcena'



The word attar is from the Persian, which would further confirm the origins of the species. The Bulgarians have been growing this rose for attar of roses ever since the rose was introduced to Europe. *Botanica Encyclopaedia of Roses* lists the variety as Kazanlik. It blooms in Bulgaria in early June and as soon as it opens, it is picked by teams of people, mostly women, very early in the morning when the scent is strongest. It is immediately processed by covering it in water and heating it to boiling which results in a sweetly scented rose water. The water is cooled and the attar, which is light oil, floats to the surface and further processing collects it. Approximately 250 pounds of roses are required to produce one ounce of the essence.

The Valley of the Roses is a small part of a small country. Attempts to increase production by growing roses in other fertile valleys of Bulgaria have not been very successful.

It would appear that Rosa damascena is more than a little choosy about its favourite place to grow. Under the previous Socialist (read Communist) regime production declined but since its disappearance and a return to more capitalist ways the Bulgarians are working hard to reclaim their place as suppliers of 80% of the world's production.

Kazanlak itself is a small pleasant city devoted to the rose and the Rose Festival of early June, a much attended and enjoyed interlude in Bulgarian life. All kinds of rose products from rose water to the attar and cosmetics are presented.

Roses themselves are generally available but Rosa damascena is carefully reserved for the production that fuels the country's economy. Other varieties of roses are gown as ornamentals and there are many different ones to be found in public spaces and private gardens throughout the country. It would be very easy to call this little country the rose emporium of the world.



Recent Literature on Rose Research

Dr. David H.S. Richardson, Dean Emeritus,
Saint Mary's University,
923 Robie Street, Halifax, NS, B3H 3C3, Canada

This compendium summarizes papers published in research journals throughout the world. If you wish to consult the full paper and cannot find a copy at your local university, write to Professor Richardson enclosing a cheque $1 per page to cover the cost of photocopying and postage.

Cid, M.C., Morales, L. & Socorro, A.R. (2007) Influence of additional night irrigations on petal calcium levels and postharvest life of soilless roses. Proceedings of the VIII International Symposium on Protected Cultivation in Mild Winter Climates. International Society of Horticultural Science 747:513-517

In roses, calcium plays an important role in post-harvest flower quality and disease resistance. This study showed that vase life could be increased by one or two days, and flower opening enhanced, in about half the tested cut roses if the plants had been irrigated three times during the night with nutrients. Under the usual pattern of irrigation, plants grown under soilless conditions are irrigated ten times during the day. Irrigation at night to supplement daytime irrigation may therefore be commercially worthwhile, especially during the summer.

Bradley, B.F., Starkey, N.J., Brown, S.L. & Lea, R.W. (2007) The effects of prolonged rose odor inhalation in two animal models of anxiety. Physiology and Behavior 92:931-938.

Anxiety disorders are common it today's society and treated by medication or by alternative strategies such as aromatherapy. The value of rose oil for the reduction of anxiety is mentioned extensively in ancient literature, but there are few modern studies of its effectiveness. The reaction of Mongolian gerbils to stressing conditions after a 24 hour or two week exposure to Rosa damascena essential oil was monitored. It was concluded that rose oil can reduce anxiety without sedation side effects, and it does this by a mechanism that is different from diazepam, one of the anxiety medications.

Casey, C., Newman, J., Robb, K., Tjosvold, S.A., MacDonald, J.D. & Parrella, M.P. (2007) IPM program successful in California greenhouse cut roses. California Agriculture 61:71-78.

California produces 66% of the cut-flower roses in the USA. The most serious damage to the crop is caused by the two spotted spider mite, the western flower

thrip, and powdery mildew. Eight major growers, with the help of scientists, decided to implement an integrated pest management plan because of developing pesticide resistance, worker safety and the increasing costs of applied chemicals. Pest populations were monitored. Predatory mites were used to control the red spider, chemicals to control the thrips, and a predictive model, that estimated the risk of an outbreak, was employed to decide when to spray against mildew. Overall the plan worked very well, especially in central California, and substantially reduced the use of chemicals. However in the south where mildew is a chronic problem, the predictive model did not work as well as regular spraying for the fungus.

Dewitte, A., Leus, L., Van Huylenbroeck, & J., Hofte, M. (2007) Characterization of reactions to powdery mildew (Podosphaera pannosa) in resistant and susceptible rose genotypes. Journal of Phytopathology 155:264-272.

This study examined rose leaf cells penetrated by the powdery mildew fungus. A range of reactions was observed with no clear defense response being show by the susceptible cultivar 'Gomery'. In the Wichuraiana hybrid 'Excelsa' only about 30% of the fungal pentrations were normal and only a few fungal spores were formed. Finally in Rosa wichuraiana itself and R. laevigata there was a wide range of defense strategies. These included the hypersensitive response which results in host cell collapse, preventing nutrients from being transported to the fungus, and the production of active oxygen species such as hydrogen peroxide.

Frere, I., Fabry, J. & Hance, T. (2007) Apparent competition or apparent mutualism? An analysis of the influence of rose bush strip management on aphid population in wheat field. Journal of Applied Entomology 131:275-283.

Grass strips between fields of cereals can be places where predator populations can build up that reduce the impact of aphid pests on the cereals. Shrubs may be more effective than grass. However this study comparing aphid numbers on cereal fields surrounded by Rosa rugosa or grass indicated that roses did not provide any benefit. This may have been because the predators stayed on the roses, or because the strip of roses was planted afresh each year so predator populations did not have time to build up.

Goa, R., Zhang, G.M., Lan, Y.F., Zhu, T.S., Yu, X.Q., Zhu, X.P. & Li, L.D. (2008) Molecular characterization of phytoplasma associated with rose witches-broom in China. Journal of Phytopathology 156:93-98.

Rosa rugosa is an important garden plant worldwide. In the Shandong Province of China, it is also an important cash crop with the flowers and fruits being processed into Jams, foods and wines. Varieties with pink, white and purple flowers are grown. In 2005, Rosa rugosa plants in this Chinese province were found exhibiting symptoms of yellowing, witches-broom and dieback. The causal agent for this new graft-transmittable rose disease was identified as a phytoplasma. This disease is thought to have spread from nearby Paulownia trees which can be affected by the same organism. Measures are being taken to prevent further spread of the disease.

Gonzalez-Real, M.M. , Baille, A. & Gutierrez-Colomer, R.P. (2007) Leaf photosynthetic properties and radiation profiles in a rose canopy (Rosa hybrida L.) with bent shoots. Scientia Horticulturae 114:177-187.

Cut flower rose production now usually involves a combination of pruning and bending the older shoots; a system first developed in Japan in the late 1980's. The bent canopy provides a reserve of nutrients for the growth of the new upright flower shoot. This study enabled a better understanding of the functioning of the bent rose canopy and of nitrogen allocation between the flowering shoots and the bent shoots.

Halmagyi, A & Pinker, I. (2006) Cryopreservation of Rosa shoot tips: importance of preculture conditions. . Proceedings of the Vth International Symposium on in vitro culture and Horticulture Breeding. International Society of Horticultural Science 725:351-356.

Cryopreservation is the only safe efficient means to ensure that plant germplasm is preserved. In vitro grown rose shoot-tips of cv 'Fairy' and unspecified wild roses were treated for 20 minutes using a one-step combined vitrification droplet technique before freezing in liquid nitrogen. This new protocol resulted in survival of close to 70% of the cryopreserved shoot tips following thawing and cultivation on fresh media.

Jakobsone, G., Ricksta, D & Rihtere, A. (2006) Breeding of Rosa rugosa Thunb. using different tissue culture methods. Proceedings of the Vth International Symposium on in vitro culture and Horticulture Breeding. International Society of Horticultural Science 725:211-215.

In Latvia, and countries with other cold climates, Rosa rugosa hybrids are ideal for parks and gardens. However no cultivars are available with yellow, orange or bright red flowers. Part of the problem following hybridization, the embryos often abort.. This study showed that one week old embryos could be removed

from the young seeds and cultivated in vitro. It is hoped that plants can be regenerated from these rescued embryos and will yield flowers with the sort-after colours.

Jurgens, A.H., Seitz, B. & Kowarick, I. (2007) Genetic differentiation of Rosa canina (L.) at regional and continental scales. Plant Systematics and Evolution 269:39-53.

Rosa canina produces offspring that have predominantly maternal characteristics but the rate of out-crossing is high, i.e. the ovules in the hips are pollinated by pollen from other plants. The somewhat greater genetic variation found in populations of this species in Bavaria and Hungary, compared with plants growing in Brandenburg, may reflect contributions from plants of this species growing in southern Europe that survived on glacial refugia during the last ice age.

Nyalala, S. & Grout, B. (2007) African spider flower (Cleome gynandra L./ Gynadropsis gynandra (L.) Brig.) as a red spider mite (Tetranychus utricae Koch) repellant in cut-flower rose (Rosa hybrida L.) cultivation. Scientia Horticulturae 114:194-198.

Miticides account for more than 40% of pesticide volume and 50% of pesticide cost on commercial rose crops. Companion planting with this spider flower from Kenya was effective at reducing spider mite infestations on nearby roses and did not affect production or flower quality. The leaves of the spider flower produce volatile mite-repellant compounds that cause the mites to move away from the area

Ohkawa, K., Ohno, H., Kim, H., Tamagawa, A., and Suh, J. (2005). Mechanism of reduction of cut rose flower longevity as affected by brittle leaf formation. Proceedings of the VIIIth International Symposiumn on Postharvest Physiology of Ornamentals. Acta Horticulturae. 669: 199-206.

The vase life of some cut roses grown in Western Europe is shorter during the period from October to March. This decline is mostly due to the production of brittle leaves. Such leaves are less waxy and lose water because the stomata do not close as well. In varieties like 'Docut' and 'Asami Red' up to 40 percent brittle leaves are formed during winter while in others only about 5 percent of the leaves are brittle.

Oyant, L.H., Crespel, L., Rajapakse, S., Zhang, L. & Foucher, F. (2008) Genetic linkage maps of rose constructed with new microsatellite markes and locating QTL controlling flowering traits. Tree Genetics & Genomes 4:11-23.

A new set of microsatellite markers (simple sequence repeats) from expressed sequence tags have been developed and used to establish genetic linkage maps for roses. The new maps identified the quantitative trait loci that provide the genetic control for aspects such as petal number and blooming date in roses. The maps will increase our understanding of rose genetics and the information should, in the future, help rose breeders

Robinson, S., Dixon, M.A. & Zheng, Y. (2007) Vascular blockage of cut roses in a suspension of Pseudomonas fluorescens. Journal of Horticultural Science and Biotechnology 28:808-814.

Bacterial blockage of the water-conducting vessels in the cut ends of rose stems leads to cavitation (the formation of air bubbles which prevent water flow in the tiny tubes) further up. The result is a shorter vase life. The bacterial contamination is usually restricted to the bottom two inches of stem. Regular removal of this portion, every 12 to 15 hours, clean water and clean vases all reduce bacterial blockage and the number of cavitation events, ensuring the maximum vase life of the cut flowers.

Spinarova, S., Hendriks, L., Steinbacher, F., Schmid, O. & Hauser, B. (2007) Cavitation and transpiration profiles of cut roses under water stress. European Journal of Horticultural Science 72:113-118.

When roses are cut and left out of water, there is a short period of increased water loss from the leaves as the stomata open in response to the release of tension in the stem. This is called the Iwanoff Effect. Water loss then decreases over the following few hours as the stems dehydrate, stomata close, and cavitation events (air bubble formation) occur in the stem, especially in the flower stalk. Replacing the cut roses in water relieves the water stress, but only partially. This can be monitored by measuring cavitation events in the flower stalks with ultrasonic acoustic sensors and water loss (transpiration) from the leaves

Yohalem, D.S., Paaske, K., Kristensen, K. & Larsen, J. (2007) Single application prophylaxis against gray mold in post rose and pelargonium with Ucladium atrum. Biological Control 41:94-98.

Gray mold, Botrytis cinerea, is a constant threat for those producing pot roses on a commercial scale. Pre-emptive treatment of the plants using spores of the antagonist fungus Ulocladium atrum was as effective as fungicidal treatment. This strategy was superior to no treatment or treatment following gray mound infection. Pre-emptive application of Urocladium, which is an aggressive sap-

rophytic colonizer, also helps to prevent gray mold invasion of detritus and wound sites following pruning of the pot roses.

THE CLEARING HOUSE

Compiled and Edited by
Richard Chambers
157 Pinewood Ave., Toronto, ON, M6C 2V6
E-mail: c/o info@canadianrosesociety.org or
rwcan04@yahoo.com

The following are the reports that I have received from the 2007 gardening season to be published in the Clearing House in the Canadian Rose Society's 2008 Annual. From 5 contributors, I have received this year a mere 26 reports. I would like to thank those who took the time to report on the new varieties that they are growing in their gardens.

The Clearing House has been a part of the CRS's Annual since the beginning in 1955, but first appeared in the 1939 Rose Society of Ontario Yearbook, the precursor to the Canadian Rose Society, and so represents almost seventy years of unbroken comments, kind and otherwise, from rose gardeners passing judgement on the new varieties introduced by rose breeders. This years participation was the lowest in many years, and unless there is increased reporting from members the Clearing House will disappear. That would be a shame, not only to lose a long historical record of roses grown in Canada, but as a source of valuable information for people interested in purchasing new roses for their gardens.

This year, close to 40 varieties introduced in 2000 have reached the end of their tenure in the Clearing House. A number of them are worthy of mention and will probably remain in gardens for a number of years to come: The exhibition Hybrid Tea 'Gemini' (Zary); The Austin Shrub rose 'Crocus'; the Shrub rose 'Knockout' (Radler); In my opinion, the best of the 'Flower Carpet' series, 'Red Flower Carpet' (Noack); A number of Miniature roses introduced by Canadian hybridizer Brad Jalbert; And finally, perhaps the most interesting of the Morden roses, 'Morden Sunrise'.

I urge members and readers to submit their comments on the newer rose varieties that you have grown in the 2008 season – even one report is an important addition. All roses *introduced in or after 2001* are eligible, but if you are uncertain about the date, send it along and I will make a determination. Report forms have been included with the 2008 Annual or can be obtained from the addresses above. Readers are particularly interested in how a variety grows in your garden. Does it repeat quickly? What colour is it in your garden? Is it a good garden or an exhibition variety? Is it disease-resistant (an increasing consideration)? Will you get rid of it, keep it, get more?

Report forms can be sent to the Editor at the addresses above. Although not a firm deadline, I would appreciate receiving your 2008 reports before Jan. 1, 2009.

LIST OF CONTRIBUTORS

Broks, Gloria, 42 Kamloops Dr., North York, ON, M2J 3R7. Zone 6a.

Chambers, Richard, 157 Pinewood Ave., Toronto, ON, M6C 2V6. Zone 6a.

Freeman, Ethel, 15 Chiltern Hill Road, Toronto, ON, M6C 3B4. Zone 6a.

Peters, Sherry, R.R. 4, Thedford, ON, N0M 2N0. Zone 6a.

Stanton, Doreen, 172 Maplehurst Ave., North York, ON, M2N 3B9. Zone 6a.

Please Note: The full name and address, and zone, of each contributor is listed under **CONTRIBUTORS**. Surnames only are used in individual reports.

PROVINCE/COUNTRY	CONTRIBUTORS	
	2007/2008	2006/2007
Alberta	0	0
British Columbia	0	1
Manitoba	0	0
New Brunswick	0	0
Newfoundland	0	0
Nova Scotia	0	1
Ontario	5	5
Prince Edward Island	0	0
Quebec	0	0
Saskatchewan	0	0
Japan	0	0
USA	0	2
Total Contributors	5	9
Total Reports	26	77

HARDINESS ZONES

The Hardiness Zone which occurs after each contributor's name and address is an attempt to utilize the 2000 Plant Hardiness Zones Map produced by Natural Resources Canada's Canadian Forest Service scientists. The 2000 map updates the 1967 Plant Hardiness Zones Map and utilizes nine major zones – the harshest is Zone 0, and the mildest is Zone 8. Subzones (e.g. 5a, 5b) are used as in the past (Both maps can be found at: http://www.agr.gc.ca/nlwis-snite/index_e.cfm?s1=maps_cartes&page=intro). This year I have in-

cluded the 1967 Zones numbers and they appear in brackets after the 2000 Zones; if the Zone numbers are the same only one is included.

Readers of The Clearing House should be aware that the concept of "hardy/hardiness", especially when referring to roses, is not rigorously defined. If a contributor suggests a rose is 'hardy' it means only that it has survived in his or her garden with whatever form of winter protection was used. Using the Canadian Hardiness Zones allows the reader to compare the winter conditions in contributors' gardens to the reader's own garden.

ABBREVIATIONS USED IN TEXT

centimetre(s) - cm
date of introduction - int
feet - '
Floribunda – F
Grandiflora - Gr
Ground cover - (Gc)
Hybrid Tea - HT
inches - "
Kordesii Shrub - K
Large Flowered Climber - LCl
metre(s) - m
Miniature - Min
Mini-Flora - MinFl
no date - nd
plant(s) - pl(s)
Shrub rose - S
year(s) - yr(s)

ABBREVIATIONS USED FOR AWARDS

AARS	*All-America Rose Selection*
ADR	Anerkannte Deutsche Rose
ARC	American Rose Centre
AoE	Award of Excellence (Miniatures)
FA	Fragrance Award
GM	Gold Medal
PIT	President's International Trophy (England)
RNRS	Royal National Rose Society
ROTY	Rose of the Year

NOTE: Awards won by a particular rose are shown in the brief general description following the name of the variety.

COLOUR CLASSIFICATIONS

Because the Canadian Rose Society and American Rose Society colour classifications are now almost identical, abbreviations below are used throughout. Any variations are given in the text.

White or near White	W
Light Yellow	LY
Medium Yellow	MY
Deep Yellow	DY
Yellow Blend	YB
Apricot & Apricot Blend	AB
Light Pink	LP
Medium Pink	MP
Deep Pink	DP
Pink Blend	PB
Orange & Orange Blend	OB
Orange Pink	OP
Orange Red	OR
Medium Red	MR
Dark Red	DR
Red Blend	RB
Mauve or Mauve Blend	M
Russet	R

STANDARD DESCRIPTION

The standard description of each variety was constructed using information from Modern Roses 11 and from 'Rose Registrations' in *American Rose* both published by the American Rose Society in its capacity as International Registration Authority for Roses, and from the Combined Rose List 2008 (Edited by B. R. Dobson and Peter Schneider), and is given following the name of each variety: hybridizer; date of ARS registration; date of introduction; parentage (if available); official Colour Classification; a brief colour description as shown in 'Rose Registrations', Modern Roses 11, Combined Rose List 2007, Botanica's Roses, a rose catalogue, or other source; petal count; fragrance; awards. The Editor has relied almost exclusively on the Combined Rose List 2008 to determine the 'date of introduction'.

NOTE: The comment 'No reports' indicates the variety was reported on in previous years but no reports were received in the current year. For The Clearing House, a rose is reported for 7 years, plus the current year, from the date of introduction, then I state 'Last year for reporting this rose'.

HYBRID TEAS

ADRIANA, HT (Fryer '00). AB, creamy caramel. No reports. (Last year for reporting this rose.)
BLUSHING BEAUTY, HT (Dykstra '00 int '03). W. No reports.
BROOKS' RED, HT (Brooks '00). MR. No reports. (Last year for reporting this rose.)
CAJUN MOON, HT (Carruth '02 int '01) [Crystalline X Lynn Anderson]. W (PB), flowers white edged pink on upper petal surface, 26-40 petals, slight fragrance. No reports.
CAJUN SUNRISE, HT (Edwards '00 int '01). PB. No reports.
CHESHIRE, HT (Fryer '99 int '01). MY, (AB), golden honey yellow, 17-25 petals, moderate fragrance. No reports.
CHRISTINE'S DREAM, HT (Bridges '02) [King of Hearts X Thriller]. RB, medium red upper, pink/white reverse, 26-40 petals, moderate fragrance. No reports.
DREAM ORANGE, HT (Twomey '99 int '00) [Cherish X (Evening Star X Trumpeter)]. OR (OB), 26-40 petals, intense fragrance. No reports. (Last year for reporting this rose.)
DREAM RED, HT (Twomey '99 int '00) [Esmeralda X Fireburst]. MR, slight fragrance. No reports. (Last year for reporting this rose.)
DREAM YELLOW, HT (Twomey '99 int '00) [(Sonia X Prominent) X Whisky Mac]. MY, 17-25 petals, intense fragrance. No reports. (Last year for reporting this rose.)
FIREFIGHTER (HACIENDA, RED 'N' FRAGRANT), HT (Orard '04 int '00). DR, flowers dark red, velvety dark red upper, medium red reverse, large (4.5 in.), very full (40-45 petals), intense fragrance, Rome GM & FA 1998, Bagatelle, Geneva, Madrid, Monza & Saverne FA 1998. No reports. (Last year for reporting this rose.)
GEMINI, HT (Zary '99 int '00) [Anne Morrow Lindbergh X New Year]. PB, cream blushing coral pink, 25-30 petals, sweet fragrance, AARS 2000. Stanton (1 pl 2 yrs 30" ON): A pretty, light orange-pink, white centres. One bloom per stem, exhibition form with good substance. An upright, vigorous bush with dark green foliage. Good hardiness. Some scent. A good performer! (Last year for reporting this rose.)
GOLDEN FAIRY TALE (STERNTALER), HT (Kordes '06 int '05) YB. No reports.
GOLDEN OLDIE (GOLDEN OLDIES), HT (Fryer '01). DY, golden apricot, some fragrance. No reports.
GOOD LIFE (GOOD LIVE), HT (Cocker '01). OB. No reports.
HALLÉ, HT (Fryer '02). OB, Glasgow GM 2003. No reports.
HOT PRINCESS, HT (Tantau '00). DP. No reports. (Last year for reporting

this rose.)
LET FREEDOM RING, HT (Earman '04 int '05) [Prima Donna X Touch of Class]. MR, flowers red, strawberry red upper, same reverse, large (10-13 cms.), dbl (17-25 petals), no fragrance. No reports.
LOVE AND PEACE (PULLMAN ORIENT EXPRESS), HT (Lim/ Twomey, '01 int '02) [Seedling X Peace]. YB, yellow blend with pink edge, 40 petals, sweet fruity fragrance, AARS 2002. No reports.
MARILYN MONROE, HT (Carruth '02) [Sunset Celebration X Saint Patrick]. AB, soft apricot washed green on upper surface, same reverse, no fragrance. No reports..
MELLOW YELLOW, HT (Carruth '00 int '01)[O Sole Mio X Midas Touch]. DY. No reports.
MEMORIAL DAY (HEAVEN SCENT, PARFUM de LIBERTÉ), HT (Carruth '02) [Blueberry Hill X New Zealand]. MP, flowers pink with an orchid wash on upper, same tones but slightly darker reverse, very full, 41+ petals, intense fragrance, AARS 2004. Stanton (1pl 1 yr 3'): Very pretty, slightly blued pink, exhibition form, good substance, an upright growth habit with medium green foliage.
POP WARNER, HT (Edwards '00 int '01) [Crystalline X Fantasy]. PB, pink and white, 26-40 petals, mild fragrance. No reports.
ROUGE ROYALE (CARUSO) (ROUGE ROYAL), (ROYAL RED), HT (Meilland '02 Romantica Series) [(MElhirvin X MEInuzeten) X MEIcapula]. RB (DR), raspberry red, 70-80 petals, intense fragrance. No reports.
SEVENTH HEAVEN, HT (Fryer '02). OB. Stanton (1 pl 1 yr 3' ON): An eye-catching apricot blend. Exhibition form with good substance. Upright growth. Medium green foliage. No disease. A very handsome bloom.
SUNDANCE (SUNDANCER), HT (Zary '05 int '04). YB, orange, double, 17-25 petals, moderate fragrance. No reports.
THANDI, HT (Taschener 'Mother's Value' Sport '00). DP, deep pink to light red. No reports. (Last year for reporting this rose.)
THINKING OF YOU, HT (Fryer '01). MR, velvet crimson, strong fruity fragrance. No reports.
WHISPER, HT (Dickson int '03) [Solitaire X Elina]. W, AARS 2003. No reports.

GRANDIFLORA

CRIMSON BOUQUET, Gr (Kordes '99, int '00) [Bad Fussing X Ingrid Bergman]. DR, 20-25 petals, sweet fragrance, AARS 2000. No reports. (Last year for reporting this rose.)
GLOWING PEACE (PHILIPPE NOIRET), Gr (Meilland '99 int '01) [Sun King X Roxane]. YB, yellow and orange blend, 26-40 petals, slight fragrance, AARS 2001. No reports.

FLORIBUNDAS

ANTIQUE ARTISTRY, F (Clements '00). AB, yellow/buff/apricot. No reports. (Last year for reporting this rose.)

APRICOT VIGOROSA (APRICOLA, APRIKOLA), F (Kordes '06 int '00). AB, flowers apricot blend, deep apricot-yellow upper, changing to apricot and pink, medium (6 cm), full, blooms borne in small clusters, slight fragrance. No reports. (Last year for reporting this rose.)

COTILLION (PERFUME PERFECTION, SERENISSIMA), F (Zary '99 'int '00) [Seedling X Shocking Pink]. M, lavender, reverse pale lavender, 41 petals, intense sweet fragrance, Rome GM 1998, Australia GM and FA 2001. No reports. (Last year for reporting this rose.)

DAY BREAKER (DAYBREAKER), F (Fryer '04) ([Silver Jubilee X (Pensioners Voice X Cheshire Life)]). AB, flowers apricot blend, medium (4 "), full (26-40 petals), blooms borne in small clusters, slight fragrance. AARS 2004. Peters (1 pl 1 yr 2' ON): Apricot bicolour, apricot shading to pink as the flower progresses. Upright growth habit with medium green foliage. No disease. I enjoy the colour change from bud to full bloom – an unusual colour.

EBB TIDE, F (Carruth '04 int '06) ([(Sweet Chariot x Blue Nile) x Stephen's Big Purple X (International Herald Tribune x *R.soulieana derivative*) x (Sweet Chariot x Blue Nile)]). M, deep smoky purple upper, same reverse, medium (8 to 10 cms.), full (26-40 petals), blooms borne in small clusters, intense fragrance. Peters (1 pl 1 yr 1' ON): Purple; small, double blossoms which open flat showing the centres. Spindly growth habit. Small, medium green foliage. No disease. It did not do well, but my garden was very dry. I found the blossoms too small and flat for my liking. It was suppose to be fragrant, but I didn't notice any.

EUREKA, F (Kordes '03) [Bernstein-Rose X Sunflare]. YB, AARS 2003. No reports.

EVELYN REDFERN, F (Fleming, '03 int '02 CAN) [Morden Fireglow X Bonica]. MR (RB), flowers medium red, medium red upper, reverse same, double (16 -18 petals), 2.5 in. blooms borne 3-12 per cluster; moderate fragrance. No reports.

FABULOUS!, F (Zary '00 int '01) [Iceberg X Sexy Rexy]. W, 40-50 petals, slight fragrance, Lyon GM 1997. No reports. (Last year for reporting this rose.)

FLORAL FAIRY TALE (AFTERNOON DELIGHT, CERVIA, SANGERHÄUSEN JUBILÄUMSROSE), F (Kordes '06 int '04). YB (AB), flowers apricot blend, soft apricot, fading to pink upper, old-fashioned shape, medium (6-7 cm), full, blooms borne in trusses, moderate sweetish fragrance. Broks (1 pl 2 yrs 4' ON): Apricot. Lots of blooms, full multi-petaled, fragrant. Decorative form with good substance. Small, full bush with good foliage. No disease. Hardiness is good. An excellent plant that is thriving in a bed alone in

full sun. 20-30 flowers bloom at one time.

GELBER ENGEL (YELLOW ANGEL), F (Kordes '06 int '03). LY, light yellow with golden stamens, medium (6 cm), dbl., blooms borne in small clusters, slight fragrance. Freeman (1 pl 1 yr 3' ON): Bright yellow with golden stamens; small, semi-double blooms in large clusters. Decorative form with good substance. Glossy foliage. The September blooms don't drop cleanly, but this variety is a "Bloom Machine". I have never seen such fast repeats all summer long.

GRIMM BROTHER'S FAIRY TALE (GEBRUEDER GRIMM), FL (Kordes '02) OB. No reports.

HARWOOD, F (Harkness '02). MP. No reports.

HONEYWOOD, F (Fryer '02). AB, orange apricot. No reports.

HOT COCOA (NUBIA), F (Carruth '02) ([(Playboy X Altissimo) X Livin' Easy]). R, russet, smoky orange upper petal surface, deep rust reverse, moderate fragrance, AARS 2003. Peters (2 pls 1 yr 2' ON): Smoky, orange-red; double, ruffled. Slight fragrance. An upright growth habit with dark green, shiny foliage. No disease. I enjoyed the unusual colour, my husband did not.

LIONS FAIRY TALE (CHAMPAGNE MOMENT, LIONS-ROSE), F (Kordes '03). AB, ADR 2002, ROTY 2006. Broks (1 pl 2 yrs 1' ON): Light yellow, cream. Small flowers, fragrant. Decorative form with good substance. A low bush with good foliage. Not very successful; a small plant that did not flower much this year. Peters (1 pl 1 yr 3' ON): Ivory, full, HT like blooms. Upright, bushy growth habit. Dark green foliage. No disease – foliage was clean. Was a full and vigorous performer despite the drought conditions. Bloomed until a hard freeze – a good cut flower.

NEON VIGOROSA (NEON, SWEET VIGOROSA), F (Kordes '06 int '02). DP, flowers deep pink, medium (5 cm), semi-dbl, blooms borne in small clusters, no fragrance. Peters (3 pls 1 yr 2')N): Hot pink, semi-double in large clusters. Spreading growth habit. Shiny, dark green foliage. No disease. Repeated all season and provided a bright spot in the garden as the colour is visible from a distance. I would like to see a large swath planted.

OUR LADY OF GUADALUPE (SHINING HOPE), F (Zary '00). PB (MP), 25 petals, mild sweet fragrance. No reports. (Last year for reporting this rose.)

POMPONELLA FAIRY TALE (POMPONELLA), F (Kordes '06). DP. Peters (1 pl 1 yr 3' ON): Soft, medium pink. Full, double, cupped flowers., which tend to droop on the plant. Upright growth habit. Medium green foliage. No disease. Lovely in bud, but went full blown quickly and drooped.

SIMPLY MARVELOUS!, F (Zary '01 int '02) [Pink Polyanna X Arosedi]. M, 30 petals, old rose fragrance. No reports.

SORBET BOUQUET, F (Zary '00) [Tournament of Roses X Seedling]. PB, rose pink, reverse light yellow, 26-40 petals, slight fragrance. No reports. (Last year for reporting this rose.)

SUMMER SAMBA, F (Zary '00 int '01) [Sexy Rexy X Summer Fashion]. OP, (AB), apricot orange, 25-30 petals, moderate, sweet damask fragrance. No reports.
YVONNE ALEXANDER, F (Fleming '03 int '01 CAN) [Lavender Friendship X Red Hot]. MR, flowers red, medium red upper, lighter reverse, single (4-8 petals), small (1.5 in.) blooms borne in small clusters; moderate fragrance. No reports.

LARGE FLOWERED CLIMBERS

AMADEUS, LCL (Kordes '06 int '04). DR, flowers dark red, no bluing upper, medium (8 cm), dbl, borne in clusters of 5-7, no fragrance. No reports.
DIZZY HEIGHTS, LCl (Fryer '99 int '00). MR, bright red, reverse same, 17-25 petals, slight fragrance. No reports.
FOURTH OF JULY (CRAZY FOR YOU, HANABI), LC1 (Carruth '99) [Roller Coaster X Altissimo]. RB, red/white stripes, 10-13 petals, AARS '99. No reports.
MALVERN HILLS, LCl (R) (Austin '01 int '00) [Seedling X Seedling]. YB (DY), coppery yellow, little fragrance. No reports. (Last year for reporting this rose.)
NIGHT OWL, LCL (Carruth '05 int '06) [((International Herald Tribune x Rosa soulieana derivative) x (Sweet Chariot x Blue Nile)) X Rosy Outlook] M, flowers mauve, deep wine-red upper, same reverse, large (9-11 cms), single (4-8 petals), blooms borne in large clusters, moderate fragrance. No reports.
OYAL STAR & GARTER, LCL (Fryer '01). MP. No reports.

SHRUBS

BE-BOP, S (Carruth '03) [Santa Claus X R. soulieana derivative]. RB (DP), light red with a large yellow eye zone upper, yellow reverse, single (4-11 petals), slight fragrance. No reports.
BENJAMIN BRITTEN, S (Austin '02) [Charles Austin X unnamed seedling]. OR, red with a touch of orange, 41+ petals, intense fragrance, fruity. Chambers (1 pl 2 yrs 4.5' ON): An unusual colour – a bright, orange-red with a touch of silver on the reverse. Blooms in twos and threes. Decorative form and the blooms are a bit loose and floppy. Upright growth habit. Some black spot. Seems to be hardy in Toronto. This rose is an unusual colour that stands out in the garden. It also repeats quickly. I like it.
CAREFREE SUNSHINE, S (Radler '02 int '01). LY. No reports.
CÉLINE DION, S (F) (Williams '00 int Quebec '01, internationally '02) [Fifth Avenue X Tropicana]. OB, Brilliant orange-red blending to an amber gold centre, single. No reports.

CHARLES DARWIN, S (Austin '01 int '02) [Seedling X Seedling]. MY (DY), 41 petals, moderate fragrance. No reports.

CHRISTOPHER MARLOWE, S (Austin '05 int '03) [unnamed seedling X Ausgold]. OR, flowers orange-red, yellow & orange reverse, 41+ petals, moderate fragrance. No reports.

CINDERELLA (CINDERELLA FAIRY TALE, LA GIRALDA), S (LCL) (Kordes '06 int '04). LP, flowers light pink, large (10 cm), very full, borne in clusters of 4-6, moderate fruity/apple fragrance. Broks (1 pl 2 yrs 5' ON): Light pink, small flowers in clusters. Decorative form with good substance. Tall, upright growth. Dark green foliage. No disease. Hardiness is good. A bit disappointing – not many blooms. One branch shot to 5' in August, but the rest remained short.

CLAIRE LABERGE, S (HRg) (Fleming '01 CAN). MP. No reports.

CORVEDALE, S (Austin '02) [Charles Rennie Mackintosh X unnamed seedling]. PB (MP), 26-46 petals, moderate fragrance. No reports.

CROCUS ROSE, S (CITY OF TIMARU) (Austin '01 int '00) [Seedling X Golden Celebration]. W (AB), 41 petals, mild tea fragrance. Chambers (1 pl 6 yrs 5' ON): Light yellow centres blending to a light cream at the edges. Large, double blooms that come as singles and sprays. Decorative form with good substance Large arching canes that I tie back on themselves to produce short flower laterals. Some black spot. Hardy in Toronto. This rose really prefers cool springs when it is then very prolific and puts on a great show. Repeats well. I like it. (Last year for reporting this rose.)

CROWN PRINCESS MARGARETA, S (Austin '99 int '00). AB, Bright apricot-orange, 120 petals, intense fruity fragrance. Chambers (1 pl 6 yrs 5' ON): Dark apricot/butterscotch – an unusual rose colour. Mostly singles but can produce large sprays with smaller flowers. Decorative form with good substance. Upright grower. Some black spot. Seems winter hardy in Toronto without winter protection. (Last year for reporting this rose.)

CUBANA, S (Gc) (Kordes '06 int '05). AB, apricot fading to pink upper, medium (5 cm), dbl., blooms borne in small clusters, no fragrance. Peters (2 pls 1 yr 2' ON): A lovely apricot/pink blend. Small, ruffled flowers in clusters. Low, bushy growth habit. Bright green foliage. No disease. It survived the dry summer. Not a lot of blooms, but they were nice when there.

DOUBLE KNOCK OUT, S (Radler '04) [Carefree Beauty seedling X Razzle Dazzle seedling]. MR, flowers red, small (4 cm), full (26-40 petals), blooms borne in small clusters, no fragrance. No reports.

ENGLAND'S ROSE (LUDLOW CASTLE), S (Austin '00) W (AB), flowers pale apricot, 118 petals, tea fragrance. No reports. (Last year for reporting this rose.)

FALSTAFF, S (Austin '99 int '00). DR, dark crimson turning to purple, 105 petals. No reports.

JAMES GALWAY, S (LCl) (Austin '01 int '00) [Heritage X Seedling]. LP (MP), very double, fragrant. Chambers (2 pls 6 yrs 7' ON): Dark to light pink all in one bloom. Fully double, small, flat blooms with very short petals. Mainly clusters of three. Decorative form with good substance. A short climber that responds well to having the canes bent to produce flowering laterals. Some black spot. May not be cane-hardy in Toronto without protection. A nice climber for a small space. (Last year for reporting this rose.)

JUBILEE CELEBRATION, S (Austin '05 int '03) [Ausgold X unnamed seedling]. PB (OB), pink blend upper, yellow reverse, 41+ petals, intense fragrance. No reports.

KNOCK OUT (PURPLE MEIDILAND), S (Radler '99 int '00). RB (LR), 5-11 petals, single, slight tea fragrance, AARS 2000. ADR 2002. No reports. (Last year for reporting this rose.)

MISS ALICE, S (Austin '01 int '00) [Mary Rose X Seedling]. LP, peach to pale pink, 41 petals, old rose fragrance. Chambers (1 pl 6 yrs 1.5' ON): Blush pink, large old-fashioned shaped blooms. This rose is a very short grower and not a very prolific bloomer. Would only consider it for the front of the bed in a very small garden. (Last year for reporting this rose.)

MORDEN SUNRISE, S (Davidson, Agriculture Canada '99 int '00 - Parkland Series). YB, apricot buds, yellow blend, semi-double. Freeman (1 pl 6 yrs 5' ON): Yellow with orange shading. Single blooms with wavy petals, come in large clusters. Good substance. A bit of black spot. This is my third try with 'Morden Sunrise' – The first two were puny and died but this one, planted in a sunnier location, is a show stopper! Always in bloom, sets lovely hips, and stops passers-by. (Last year for reporting this rose.)

PALS NIAGARA, S (Rg) (Fleming '04 int '03 CAN) [Red Hot X breeding line 83, issued by Ag Canada]. MR, flowers red, medium red upper, slightly lighter reverse, medium (3 in.), full (26-40 petals), blooms borne in large clusters, no fragrance. No reports.

PETER JOHN, HMsk (Jerabek '00 int '03). OP. No reports. (Last year for reporting this rose.)

PILLOW FIGHT, S (Carruth '99, int '00) [Pink Polyanna X Gourmet Popcorn]. W, 17-25 petals, intense honey and rose fragrance. No reports. (Last year for reporting this rose.)

PINK KNOCK OUT, S (Radler '04). MP. No reports.

RED FLOWER CARPET (ALCANTARA) (RED HEIDETRAUM) (RED VELVET) (VELVET FLOWER CARPET) (VESUVIA), S (Gc) (Noack '01 int '00). MR. No reports. (Last year for reporting this rose.)

ROSY VISION, S (Arnold '06 CAN). MP, flowers medium pink, medium pink upper, medium pink/yellow base reverse, medium (3.5 in.), full (26-40 petals), blooms borne in large clusters, no fragrance. No reports.

ROYAL AMBER, S (Clements '00). AB, amber and yellow. No reports. (Last year for reporting this rose.)

STARRY NIGHT (ANITA PEREIRE), S (Orard '02) [Anisley Dickson X R. wichurana]. W, single, 5 petals, mild fragrance. Paris Gold Medal 1996. AARS 2002. No reports.
THE GIFT, S (Pol) (Demits '81, int '00) W. No reports. (Last year for reporting this rose.)
THE INGENIOUS MR. FAIRCHILD, S (Austin '04) [unnamed seedling X unnamed seedling]. PB, light pink upper, mauve reverse, very full, 41+ petals, moderate fragrance. No reports.
VANCOUVER BELLE, S (Jalbert '04 CAN) [Thelma's Glory X Sexy Rexy]. LP, flowers light pink, pink upper, lighter pink reverse, dbl. (17-25 petals), slight fragrance. No reports.
WHAT A PEACH, S (Warner '01 int '02) [Laura Ford X Sweet Magic]. AB, apricot, strong fragrance. No reports.
WILLIAM BOOTH, S (K) (Agriculture Canada, '99 - Explorer Series). MR (LR), deep red bud changes to medium red, fades to light red, 5 petals, hardy in Zone 3. No reports.
WILLIAM SHAKESPEARE 2000, S (Austin '01 int '00) [Seedling X The Dark Lady]. MR (DR), purplish red, 41 petals, strong old rose fragrance. No reports. (Last year for reporting this rose.)
WISLEY, S (Austin '05) ([unnamed seedling (apricot English type shrub) X Ausgold]). DP, flowers deep pink, large (6.5 cms), very full (41+ petals), blooms borne in small clusters, moderate fragrance. Peters (2 pls 1 yr 2' ON): Deep pink, full, double, fragrant. An upright, rounded growth habit. Medium green foliage. No disease. Had only a few flowers because of the drought conditions, but they were lovely and fragrant.

MINIATURES/MINI-FLORAS

AMY GRANT, MinFl (Tucker '98 int '99). LP, light pink/white. No reports.
AUNTIE LOUISE, Min (Jalbert '04 int '00 CAN) [Orange Honey X Sexy Rexy]. OB, orange upper, lighter orange reverse, amber yellow with orange shades, full, 26-46 petals, slight fragrance. No reports. (Last year for reporting this rose.)
BABE, Min (Lougheed '04 CAN). MP. Stanton (2 pls 3 yrs 1' ON): A pretty bloom which is more coral than pink. Exhibition form with good substance. Upright growth habit. Dark green, matte foliage. Gets black spot. Hardiness is good.
BABY BOOMER, Min (Benardella '03 int '01) [Ivory Beauty X Kristin]. MP (LP), medium pink, lighter pink reverse, 16-22 petals, mild fragrance, AoE 2003. No reports.
BEST FRIENDS, Min (Bridges '02) [Hot Tamale X unknown seedling]. OB,

yellow reverse, AoE 2002. No reports.
CALIENTE (MY SWEETIE), Min (Benardella '05) [Ruby X Timeless]. DR, flowers dark red, dark red upper, medium red reverse, medium (2 in), full (26-40 petals), blooms borne mostly solitary, moderate fragrance, AoE 2006. No reports.
CARLEY (CARLEY REGAN), Min (Jalbert '04 CAN). MR. Stanton (1 pl 4 yrs 1' ON): A good velvety red. Exhibition form with good substance. Upright growth. Medium green foliage. Hardiness is good. An attractive and eye-catching rose. As with most of my roses, the drought did some interesting and not always attractive things!
CAROLINA LADY, Min (M. Williams '00). MR. No reports. (Last year for reporting this rose.)
CHATTOOGA, Min (M. Williams '04) [Pierrine X selected pollen]. DP, deep pink, double, 17-25 petals, no fragrance, AoE 2005. No reports.
CHLOE'S STAR (CHLOE), Min (Pazdzierski '02 int '03) ['Brittany's Glowing Star' Sport]. MY, double, 17-25 petals, slight fragrance. No reports.
CONSTELLATION, Min (Saville '00). W. No reports. (Last year for reporting this rose.)
CORAL REEF, Min (Mini-Moss) (Jalbert '04 int '00 CAN) [Dresden Doll X Silver Jubilee]. MP, medium pink, rich coral colouring, full, 26-40 petals, heavily mossed buds, scented moss, sticky, slight fragrance. No reports. (Last year for reporting this rose.)
DORIS MORGAN, Min (Bridges '02) [Jennifer X Purple Dawn]. DP, deep pink, light pink and white, 17-25 petals, moderate fragrance, AoE 2003. No reports.
DOUBLE GOLD, MinFl (White '03) [((Zorina X Baby Katie) X June Laver) X Old Glory]. YB (DY), yellow blend, light yellow and golden-yellow upper, reverse same, 26-40 petals, strong rose fragrance. No reports.
ELOISE, MinFl (Fleming '03 int '02 CAN) [Alberta X Lavender Dream]. MP, flowers medium pink, reverse same, double (17-25 petals), medium blooms borne in small clusters, slight fragrance No reports. .
ERIN ALONSO, Min (Alonso '03 int '04) [Sport of 'Bee's Knees']. MY, full (26-40 petals), slight fragrance. No reports.
GALA, Min (Saville '99 int '00) [High Jinks X Seedling]. DP, 17-25 petals, no fragrance. No reports. (Last year for reporting this rose.)
HEIDI PARADE, MinFl (Poulsen '01). MP, coral pink/cream to green petal bases. No reports.
HIGH FLIGHT, Min (Harkness, int White Rose Nurseries, '01). W, tinged with green. No reports.
HILDE, Min (Benardella '99 int '01) [Figurine X Kristin]. RB(PB), white with red washing, reverse ivory, 17-25 petals, moderate fragrance. No reports.
ICED RASPBERRY, Min (White '05). RB, flowers dark and medium red upper, white and red reverse, small (1.75 in), very full (41 + petals), blooms

borne mostly solitary, slight fragrance, AoE 2006. No reports.
JESLYN, Min (Bridges '00 int '01). LY. No reports.
LITTLE PINKIE, Min (Micro-mini) (Moore '00), MP, very double. No reports. (Last year for reporting this rose.)
LOVE KNOT, Min (ClMin) (Warner '99 int '00) (Laura Ford X Ingrid Bergman). MR, bright red, 17-25 petals, slight fragrance. No reports. (Last year for reporting this rose.)
MAGENTA MYSTIQUE, Min (Benardella '05) [unnamed X Kristin]. M, very full, 41+ petals, moderate fragrance. No reports.
MARILYN WELLAN, Min (Moe '99 int '01) [Sheri Anne X Wistful]. LP, apricot/ reverse lighter, 17-25 petals, slight fragrance. No reports.
MEMPHIS KING, MinFl (Wells '03). DR, flowers dark red, medium, full (26-40 petals), blooms borne mostly solitary, slight fragrance. No reports.
MERLOT (SPARKLE BERRY), Min (Benardella '02) [Figurine X seedling]. RB, dark red upper, coated white reverse, 17-25 petals, slight fragrance, AoE 2002. No reports.
MICHEL CHOLET, Min (Jacobs '00) [Prima Donna X San Jose Sunshine]. AB, dark rich apricot, slight fragrance, AoE 2001. No reports. (Last year for reporting this rose.)
MISTRAL PARADE, MinFl (Poulsen '01). DY. No reports.
MIXED EMOTIONS, Min (Jalbert '03 CAN). RB (striped). No reports.
NEON COWBOY, Min (Carruth '02 int '03) [Emily Louise X (Playboy X Little Artist)]. RB, red with yellow on upper petal surface, yellow reverse, single, slight fragrance. No reports.
PEACH DELIGHT, MinFl (Saville '02) [Sequoia Gold X Harmony]. AB, peach upper, pale apricot reverse, 41+ petals, slight fragrance. No reports.
REAH NICOLE, MinFl (Jalbert '04 int '00 CAN) [Loving Touch X Kristin]. PB, pink blend, pink, cream upper, pink-cream reverse, full, 26-40 petals, slight fragrance. No reports. (Last year for reporting this rose.)
RED SCENTSATION, Min (White '03) [Taxi X ((Party Girl X Sparks) X New Zealand)]. MR, medium red upper, reverse same streaked with burgundy, 17-25 petals, very fragrant. No reports.
RUBY BABY, Min (Christopher '01) ['Hot Tamale' Sport]. RB (OR). No reports.
SALUTE, Min (White '03) [(Vista X Party Girl) X (Party Girl X Teddy Bear)]. DR, double, 17-25 petals, slight fragrance, AoE 2004. No reports.
SCUGOG SUNRISE, Min (Jalbert '05 CAN). PB, blends of apricot and pink with flushes of salmon. Stanton (2 pls 2 yrs 15-18" ON): Prolific, good clusters, pretty. Exhibition form with good substance. Vigorous. Dark green, matte foliage. Some black spot. Hardiness is good. It wins ribbons!!
THE COLOUR PURPLE, Min (Jalbert '04 CAN) [Loving Touch X Rubies 'n' Pearls]. M, unique deep purple colour, dbl. (17-25 petals), moderate fragrance, lemon-scented. Stanton (2 pls 3 yrs 15" ON): The colour is really pur-

ple! Exhibition form with good substance. An upright, vigorous grower. Shiny, dark green foliage. Hardiness is good. Dropped its leaves, but I think it was more due to the drought than black spot.

THE McCLAREN ROSE, Min (Jalbert '00 CAN). DY. Stanton (1 pl 2 yrs 15" ON): A good dark yellow. Decorative form with good substance. A neat, upright growth habit. Medium green foliage. Some black spot. Hardiness is good. I'd like more blooms! (Last year for reporting this rose.)

WIND RHYTHM, MinFl (Jalbert '01 CAN). OB. No reports.

YEAR 2000, Min (Jalbert 2004 int '00 CAN). YB (RB), yellow edged bright red. No reports. (Last year for reporting this rose.)



Photo on covers:

Dr Neville Arnold developed this rose and donated it to the Canadian Rose Society on the occasion of our 50th anniversary.

The name of the rose is Rosy Vision

Description: The rose-red buds open to rose-red flowers borne in large clusters of rose-pink, (see photo..) on stout, well-armed canes. Plants have shown very vigorous growth, to approx. 1.5 m (5 ft) height, with healthy, mid-green foliage; which appears to be disease resistant. The cultivar is winter-hardy in Canada zone 5, and under test in even colder-winter areas.

